Santa Clara Valley Water District's

Clean, Safe Creeks and Natural Flood Protection Program

A 15-year program to preserve and protect our quality of life

FISCAL YEAR 2012-2013 | YEAR 12

Clean, Safe Creeks and Natural Flood Protection Program

MESSAGE FROM THE BOARD CHAIR

January 2014

This year marks the completion of the 12th and final year of the Clean, Safe Creeks and Natural Flood Protection Plan (CSC). The CSC program was approved in November 2000 as a countywide special parcel tax to fund Santa Clara Valley Water District initiatives to protect homes and businesses from floods; add recreational trails; and improve, restore, and enhance creeks and watersheds.

These projects have provided flood protection and watershed enhancements that have and will continue to benefit our community for years to come.

- During the past 12 years, the District approved 36 grant applications that resulted in 609 acres of environmental restoration throughout Santa Clara County; far exceeding the goal to create or restore 100 acres of tidal or riparian habitat
- The program provided public access to over 70 miles of trails through approval of 28 grants and numerous joint use agreements
- These grant-related projects provided matching funds to leverage over $61.8 million in partner funding to complete habitat restoration and trail projects. These items were completed ahead of schedule in the first 12 years of the 15-year CSC program
- The program also funded vegetation management of 619 acres of creek side habitat to improve the floodwater carrying capacity of our local streams
- District staff responded to 1,392 reports of pollutants in Santa Clara County creeks and reservoirs, removed 2000 kg of mercury from the Guadalupe Watershed, eliminated 5,800 pounds of trash, and cleaned 4 million square feet of graffiti
- Nine flood protection projects were included under the CSC program. The first completed project was the Calabazas Creek project, providing 1-percent flood protection to 2,483 parcels in the Calabazas Creek watershed. Five projects are ongoing and on schedule to be completed. Three projects, hampered by diminishing state and federal funding, have been re-scaled and will be provided by the new Safe, Clean Water and Natural Flood Protection Program (see below)

All of the planning, design, construction and restoration work associated with Clean, Safe Creeks has been conducted transparently and overseen by an Independent Monitoring Committee (IMC) consisting of community volunteers. This group has closely monitored and annually reported on the program's progress, ensuring the outcomes would be met in a cost-efficient manner. During the past 11 years, the IMC prepared an annual report describing the program's achievements and progress which can be found at ***www.valleywater.org/Programs/MonitoringCommittee.aspx***. We thank all of these dedicated individuals for their service in ensuring the highest quality and most effective outcomes on behalf of our community.

As a result of the CSC program evaluation conducted in June 2012, an improvement going-forward is to have an annual staff — developed report for District Board oversight and approval. The IMC is responsible for reviewing and periodic auditing of the approved report, as well as providing ongoing recommendations for improvements. The Board will review IMC recommendations; those which are adopted will be implemented by staff.

In November 2012, the voters of Santa Clara County overwhelmingly passed a measure to fund the Safe, Clean Water and Natural Flood Protection Program. This new program is, in part, a continuation of the important work initiated in the original Clean, Safe Creeks plan. The long-term priorities of the program include:

- Ensuring a safe, reliable water supply for the future
- Reducing toxins, hazards and contaminants, such as mercury and pharmaceuticals, in our waterways
- Protecting our water supply and local dams from the impacts of earthquakes and natural disasters
- Restoring fish, bird, and wildlife habitat and providing open space access
- Providing flood protection to homes, businesses, schools, streets and highways

In May 2013, the Board of Directors approved the 5-year implementation plan and the program was initiated in July 2013. For more information, visit ***www.valleywater.org/SafeCleanWater.aspx***.

Water District staff will continue to work hard to protect and manage our water resources today to ensure Silicon Valley's sustainability into the future. We hope you find this report helpful and informative and welcome your inquiries and insightful comments, as always.

Sincerely,

Nai Hsueh, 2013 Board Chair
Santa Clara Valley Water District

On Nov. 6, 2012, Santa Clara County voters overwhelmingly supported — with nearly 74% of their votes — the 15-year Safe, Clean Water and Natural Flood Protection Program. This program will now replace the Clean, Safe Creeks and Natural Flood Protection Plan approved by voters in 2000.

SUMMARY OF PROGRAM STATUS

Background

In November of 2000 the voters of Santa Clara County supported a ballot measure entitled the Clean, Safe Creeks and Natural Flood Protection Program (Program). This program created a countywide special parcel tax and promised four major outcomes that would be completed over the course of a fifteen-year period. Those outcomes were:

1. Homes, schools, businesses and transportation networks are protected from flooding
2. There is clean, safe water in our creeks and bays
3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Santa Clara Valley Water District Board of Directors
4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate

In addition the ballot measure created an independent monitoring committee, appointed by the Santa Clara Valley Water District Board of Directors (Board). The Independent Monitoring Committee (Committee) annually reviewed the implementation of the intended results of the Program and reported its findings to the Board, who provided the Committee report to the residents and voters of Santa Clara County. With the passing of Measure B in November, 2012, the Committee's role shifted from that of a monitoring role to one whose role is that to audit the annual implementation and results of the program.

When the voters passed this measure in 2000, the historical practice had been that if a local jurisdiction taxed itself to pay for flood protection, the federal and state government would more than match those funds. The District had a successful track record of obtaining sufficient state and federal funds and anticipated this continued support for matching dollars to complete the flood protection projects outlined in Outcome 1 of the Plan. Three of the nine flood protection projects — Upper Guadalupe River, Upper Berryessa Creek, and Upper Llagas Creek — depend upon state and federal funds to fully implement. Funding for these projects will now be provided by the new Safe, Clean Water program.

One of the recommendations of the Clean, Safe Creeks and Natural Flood Protection Program (Program) independent audit report finalized on June 15, 2012 was to ensure that the Watershed Chief formally serve as official "owner" of the Plan to reconcile inconsistencies and resolve any lack of clarity regarding definition of terms and concepts. A first step in providing Program clarity was to align all projects on a common timeline defined by the District Fiscal Year (FY), which begins July 1st and ends on June 30th. Historically, many of the capital projects identified in this program were originally based on a calendar year schedule (i.e., all capital projects have a construction completion date of December 2016 which occurs in Fiscal Year 2016-2017 or FY17. All tables and timelines are now displayed in a common timeline to allow for easier analysis of the Program.

The following sections summarize project performance achieved under the four outcomes of the Program:

Outcome 1: Homes, schools, businesses and transportation networks are protected from flooding.

1.1 Provide flood damage reductions by increasing the stream's ability to convey the 100-year flow.

A. Permanente Creek — Project is currently scheduled to begin construction in June 2014. This project will protect up to 2,700 parcels. The District has completed 90% design for the Permanente Creek channel widening, floodwalls and levees, and the new Diversion Structure. The District has completed 60% design for the Hale Creek channel widening and the Rancho San Antonio flood detention basin project elements. Lastly, the District has prepared preliminary design for the McKelvey Park flood detention basin. The project is on schedule to provide flood protection to 2,700 parcels by 2016.

Objectives and Benefits

- Provide flood protection; reduce erosion and sedimentation from the San Francisco Bay to El Camino Real
- Protect a minimum of 1,664 parcels from 100-year flooding (note that actual parcels protected would be approximately 2,720)
- Address the deterioration of aging facilities

Significant Accomplishments 2001-2013

- Project planning reports completed in 2008
- Project EIR completed in 2010
- Project subsequent EIR completed in 2012
- Agreements for site use for the two detention basin sites are completed in 2013

Planned Activities for FY14

- 100% design for Permanente Creek channel widening by December 2013
- 100% design for Rancho San Antonio flood detention by April 2014
- Obtain regulatory permits by April 2014
- Obtain remaining easements by January 2014
- Begin construction for Permanente Creek channel widening June 2014

Opportunities and Challenges

Obtaining regulatory permits could delay initiation of construction.

B. San Francisquito Creek — The project is to provide planning and design (not construction) to protect 3000 homes and businesses from a 1 percent flood for the area extending from San Francisco Bay to Searsville Dam. Following the severe flood in February 1998, the cities of East Palo Alto, Menlo Park and Palo Alto along with the San Mateo County Flood Control District and the Santa Clara Valley Water District formed the San Francisquito Creek Joint Powers Authority (Authority) on May 18, 1999.

The Authority entered into a Feasibility Cost Share Agreement ("FCSA") with the San Francisco District of the U.S. Army Corps of Engineers' (USACE) for the Study on the Creek. The USACE, pursuant to the FCSA, is developing a project to evaluate flood protection and ecosystem restoration opportunities within the San Francisquito Creek Watershed in Santa Clara and San Mateo Counties.

Since initiating the Feasibility Study in November 2005, the project schedule has not been maintained, slipping by approximately 3 years to date. The USACE, due to a lack of federal funding, has greatly reduced their project efforts. The community has expressed significant concerns regarding project delays. Per the District Board direction, District staff has completed a Planning Study Report and has proceeded with the design of the project.

To comply with the new Civil Works guidance for feasibility studies, the USACE held a planning charette on August 14 and 15, 2013. It resulted in rescoping the project to focus on Reach 2 (Highway 101 to El Camino Real) for only flood risk management project.

Objectives and Benefits

- Provide planning and design (not construction) to protect 3000 homes and businesses from a 1 percent flood for the area extending from San Francisco Bay to Searsville Dam
- Reduce sedimentation and improve water quality
- Restore ecosystem quality, habitat, and function where possible
- Minimize project impacts on the environment — both long range and during construction.
- Identify opportunities to provide for public recreation

Significant Accomplishments 2001-2013

- The USACE completed a reconnaissance study for the Creek in March 2005
- The Authority entered into a Feasibility Cost Share Agreement ("FCSA") with the San Francisco District of the USACE for the Feasibility Study on the Creek in November 2005
- The Authority completed an environmental document for the Bay to Highway 101 project in October 2012 and submitted the regulatory permit application in January 2013
- The District prepared a Planning Study Report for the Project in 2013

Planned Activities for FY14

- Prepare final design documents for the Bay-101 project by February 2014
- Acquire regulatory permits for the Bay-101 project by January 2014
- Prepare 60% and 90% design document for staff recommended alternative for Reach 2 by June 2014
- Prepare 30% and 60% design documents for Pope Chaucer Bridge replacement by June 2014
- Obtain a design consultant for the Middlefield Rd. Bridge replacement by April 2014

Opportunities and Challenges

The project is on schedule to complete planning and design. As we transition to the SCW program, challenges include:

- Securing funding to complete construction of Reach 1 (Bay-101)
- Obtaining regulatory permits
- Acquiring all necessary easements in both Santa Clara and San Mateo counties

C. Sunnyvale West/East Channel Flood Protection Projects (Project)

West Channel — Summary

The West Channel extends approximately 3 miles and will upgrade existing channel capacity to provide 100-year riverine flood protection for 47 acres of highly valuable industrial lands, including the Onizuka Air Force Base. Project will decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality. Sunnyvale West Channel Project is combined with Sunnyvale East Channel Project and is scheduled to begin Project construction in summer of 2014 and complete by December 2016.

East Channel — Summary

The East Channel extends approximately 6.4 miles and will upgrade existing channel capacity to provide 100-year riverine flood protection for 1,618 parcels. Project will decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality. Sunnyvale East Channel Project is combined with Sunnyvale West Channel Project and is scheduled to begin Project construction in summer of 2014 and complete by December 2016.

Significant Accomplishments 2001-2013 (Sunnyvale West/East Channel)

- Completed Planning Study Report, identifying the Recommended/Preferred Alternative
- Executed an Environmental Consultant Contract to Prepare Project Environmental Impact Report (EIR)
- Executed a Geotechnical Contract to conduct a Geotechnical Investigation and Report of Findings
- Completed Hydraulic Analysis
- Completed 30% design submittal
- Completed Structural Feasibility Report of existing bridges/culverts to analyze whether existing structures can support proposed headwalls
- Analyzed Caribbean Bridge Replacement alternatives
- Completed Geotechnical Investigation and Report of Findings
- Completed 60% design submittal

- Completed Structural Design of Caribbean Drive Box Culvert and other structures
- Completed Traffic Study for Caribbean Drive
- Completed Administrative Draft EIR
- Completed 90% design submittal
- Released Draft EIR for Public Review

Planned Activities for FY14 (Sunnyvale West/East Channel)

- Coordinate with the various Utility Companies, including PG&E on all the relocations needed for the Project
- Acquire the necessary right of way and staging areas required for the Project
- District Board certifies the Project EIR in March 2014
- Complete Final Plans and Specifications in March 2014
- Acquire necessary regulatory permits by May 2014
- Advertise and begin Project construction in Summer 2014

Opportunities and Challenges (Sunnyvale West Channel)

The significant challenge is to coordinate the construction of the Carl Road box culvert with the City of Sunnyvale Wastewater Pollution Treatment Plant (WPTP) staff as the existing Carl Road crossing serves as their only access to portions of the WPTP facilities out in the lower San Francisco Bay region. In addition, the existing Carl Road box culvert has several gravity feed extraction conduits to their existing adjacent landfills that are required to remain in service 24 hours/seven days a week. Finding resolutions to these WPTP challenges are on-going.

Opportunities and Challenges (Sunnyvale East Channel)

The significant challenge is to complete the construction to replace the existing Caribbean Drive Bridge with a new triple cell box culvert. The Project team has asked the City of Sunnyvale to consider allowing a complete closure of Caribbean Drive to avoid a two year construction window, expensive detours, lane closure, public safety concerns, etc. that are involved with a partial closure. The City of Sunnyvale requested a traffic study be completed to justify a full closure of Caribbean Drive to facilitate construction. The completed traffic study was submitted to the City of Sunnyvale in September 2013 and Project team is awaiting a decision by the City of Sunnyvale.

D. Calabazas — The Project's objective was to provide 1 percent flood protection to 2,483 parcels in the Calabazas Creek watershed between Miller Avenue and Wardell Road. A long detention basin parallel to the creek was built to capture high storm flows, preventing the creek from overtopping its banks in a 100-year flood.

The District also repaired 14 severely eroding banks, using as little "hardscape" as possible. The Project incorporated environmental stewardship principles to reduce erosion with vegetation to enhance habitat for wildlife. The district reduced the cost of the project by collaborating with the City of San José, which rebuilt a BMX park at Calabazas Park.

On November 20, 2012, the District and the cities of Saratoga, San José, and Cupertino received notification from the Federal Emergency Management Agency (FEMA) that the Letter of Map Revision (LOMR) submittal for the Calabazas Creek Flood Protection Project had been approved. The LOMR submittal revises the Flood Insurance Rate Map and FIS Report per our request for the area upstream of Miller Ave. Dates of the effective revisions are April 4 and April 11, 2013 for parcels 209H, 216H, and 217H. The project objectives have been met.

Objectives and Benefits

- Provide flood protection on Calabazas Creek from Miller Avenue to Wardell Road
- Protect 2,483 parcels from 100-year flooding

- Provide erosion protection measures to improve stream quality
- Identify environmental restoration and enhancement and recreational enhancements, where opportunities exist

Significant Accomplishments 2001-2013

- Completed modification of box culverts at Saratoga-Sunnyvale Road and replacement of Union Pacific Railroad (UPRR) crossing in October 2011
- Completed bank erosion repair at 14 locations
- Completed mitigation planting in February 2012
- Received LOMR approval in November 2012

Planned Activities for FY14

Project is complete and all objectives have been met.

Opportunities and Challenges

Mitigation included planting more than 700 plants of 16 different species of native plants. At this time all success criteria are being met or exceeded. Some of the plants are already established and no longer receiving supplemental irrigation. The greatest maintenance challenge is the very close proximity to neighbors back decks so that some annual mowing will continue to be required for fuel abatement. However, many of the neighbors consider the area their backyard and appreciate the added color, texture, and diversity of the plantings with the increased habitat value.

E. Upper Guadalupe River — The Upper Guadalupe River Project is designed to increase flood protection, create recreational opportunities and improve stream habitat. The project provides protection along a 5.7 mile stretch of the river, from Highway 280 to Blossom Hill Road, protecting 7,500 homes from a 100-year flood event. The project is divided into 7 reaches from Reach 6 to Reach 12 for design and construction. This is a joint project with the USACE where federal funding is authorized for design and construction. The District, as the Non-Federal Sponsor, provides funding for acquiring the rights of way and relocating bridges and utilities as needed for the flood protection project.

In October 2007, the District completed the replacement of the Willow Glen Way Bridge with funding from the District and City of San José.

In August 2012, the District completed construction of flood protection improvements and vegetation planting on Reach 6, from Highway 280 to the Union Pacific Railroad crossing. The 4-year plant establishment and maintenance period is scheduled to be completed in April 2016.

In November 2012, the USACE completed construction of flood protection improvements and some vegetation planting of Reach 10B, from Wren Drive to Koch Lane. The lack of federal funding has prevented the USACE from completing the remaining vegetation planting at this time.

The overall project completion has been delayed to December 2021 due to lack of federal funding. In March 2012, the Board directed staff to implement a modified strategy for the project. This modified strategy includes the District completing design and construction of Reach 7 (from downstream of Willow Street to upstream of Alma Avenue) and Reach 12 to meet the intent of the Local Project commitment in the Program. District staff continues working with the USACE staff to amend the Project Cooperation Agreement that will enable the USACE to accept funding contribution ($11M) from the District for design and construction of Reach 12 (from Branham Lane to Blossom Hill Road). The District continues acquiring rights of way necessary and relocating utilities for construction of flood protection improvements along the project.

Objectives and Benefits

- Provide flood protection on Guadalupe River from Highway 101 to Interstate 880 (Reach A) and from Interstate 280 to Blossom Hill Road

- Reduce flooding potential to Highway 87 and the adjacent light-rail line.
- Protect 6,989 parcels from 1 percent flood.
- Provide long term beneficial impacts to stream ecology, hydrology, wildlife, and fisheries.
- Reduce erosion and increase water quality and allow for continuous creek side trail access.

Significant Accomplishments 2001-2013

- Willow Glen Way Bridge replacement, October 2007
- Reach 10B construction of improvements, November 2012
- Reach 6 construction of improvements, August 2012
- Modified Project Strategy initiation, March 2012

Planned Activities for FY14

- Execute PCA amendment in January 2014 to use local funding for construction of Reach 12
- Complete Reach 12 design and construction contract documents in February 2014
- Award Reach 12 construction contract in April 2014
- Begin Reach 12 construction in June 2014
- Continue acquiring right-of-ways for Reaches 7 to 11

Opportunities and Challenges

The USACE has not received adequate federal funding for design and construction of Reach 12. The USACE needs to amend the existing PCA in a timely manner before it can receive funding contribution from District for design and construction of Reach 12. District staff with the USACE staff is working to ensure the project is policy compliant with a high benefit to cost ratio.

F. Upper Berryessa Creek — The project is on schedule to be completed by December 2016. Since adequate federal funding was not received to date, the District is currently moving forward with the "Local Only" option, i.e. a reduced project extending from the confluence of Lower Penitencia Creek to Montague Expressway. Recent development in the project area, i.e. the BART 10-mile extension project from Warm Springs Station in Fremont to the North San José Berryessa area is scheduled to be completed and in startup/testing operation in 2016 and begin running in 2018. The new BART system has an underground station, Milpitas Station, located in the Berryessa Creek floodplain. The Berryessa Creek project's completion is critical to the BART extension's planned operations. Therefore, the District made the decision to hire Tetra Tech to perform design from Calaveras Blvd to Montague Expressway (Phase 1) with local dollars. Should federal dollars not be forthcoming in FY14, the District will also move forward with construction. Should federal dollars come in later, we have preserved the option to build the full project.

Objectives and Benefits

- Provide flood protection on Berryessa Creek from Calaveras Boulevard to 200 feet upstream of Old Piedmont Road
- Protect more than 30 miles of streets including Calaveras Boulevard and Montague Expressway
- Protect 1,814 parcels from 100-year flooding, as described in the original Program
- Use setback levees and floodwalls and incorporate geomorphic channel designs where feasible to protect sensitive areas, minimize impacts to riparian and fisheries habitat, and provide a more sustainable creek corridor
- Provide revegetation mitigation to protect the riparian and wetland environment
- Implement sediment control measures to improve water quality and reduce maintenance
- Accommodate the cities' trail master plans that provide stream-side access along the creek

Significant Accomplishments 2001-2013

- Executed Feasibility Cost-Sharing Agreement with the USACE (June 2001)
- Held multiple community meetings to receive public input on the project (2008 thru 2013)
- Performed feasibility planning study, including survey and hydraulic analysis (September 2008)
- Evaluated different alternatives solutions (May 2012)
- Performed alternative economic analysis and identified NED plan (August 2012)
- Prepared draft GRR/EIS (April 2013)
- Executed cost-sharing agreement with VTA and County of Santa Clara to construct Montague Expressway culvert (May 2013)
- Retained Tetra Tech to perform design of Phase I to ensure project remains on schedule

Planned Activities for FY14

- Complete Final GRR/EIS by October 2013
- Execute Design Agreement with AC by Jan 2013
- Execute single source agreement with Tetra Tech by November 2013
- Start design activities by December 2013

Opportunities and Challenges

The challenge for this project continues to be federal funding for the project. Another challenge will be to complete design and construction by December 2016.

G. Upper Llagas Creek

Phase 1: Reach 4, Reach 7a and Lake Silveira offsite mitigation site — The design and Phase 1 construction of Reach 4 (Buena Vista Avenue to East Little Llagas confluence near Lena Avenue), Reach 7a (Main Branch Llagas Creek near Monterey Road to La Crosse Drive), and the Lake Silveira offsite mitigation element of the Upper Llagas Creek remain on schedule with construction to begin in 2014.

Phase 2: Remaining Project Reaches — The concurrent design and Phase 2 Construction of Reach 5 (East Little Llagas confluence to 700 feet upstream of Highway 101), Reach 6 (700 feet upstream of Highway 101 to West Little Llagas Creek), Reach 7b (La Crosse Drive to West Dunne Avenue), Reach 8 (West Dunne Avenue to 200 feet upstream of Llagas Road), and Reach 14 (Main Branch Llagas Creek to 2400 feet upstream of San Martin Avenue) remains on schedule. Phase 2 construction will need an additional estimated $46M from State subventions, federal, Safe Clean Water, and/or other available funding sources in order to complete construction. Upon completion of Phase 2, the Project will provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.

Objectives and Benefits

- Provide flood protection between Buena Vista Road and Llagas Road
- Protect 1,397 parcels from 100-year flooding
- Provide a more aesthetically pleasing and environmentally sound project than the concrete channel originally outlined in the 1982 Engineer's Report
- Provide additional wetland area and riparian habitat, and support steelhead migration within the lower reaches
- Implement erosion reduction measures to improve water quality
- Provide potential for other entities to develop recreational areas including trails, sports fields, and parks in the upper reaches

Significant Accomplishments 2001-2013

- Executed a Consultant agreement in July 2011 to prepare the project's Environmental Impact Report/Statement (EIR/S)
- Completed the project survey work as required for design
- Completed the Comprehensive Evaluation of Project Datums (CEPD) Report
- Completed the Geotechnical Investigation
- Completed the Geomorphology Study
- Complete the Noise Baseline, Cultural Resources, Wetland Delineation, Site Investigation, Least Bell's Vireo Assessment, and Lake Silveira surveys
- Completed the 30% design submittal by July 2012
- Completed the 65% design submittal by March 2013
- Project received $49K reprogrammed federal funding in FY13

Planned Activities for FY14

- Hire a Real Estate Consultant to assist SCVWD staff in acquiring an estimated 146 parcels required for the Project
- Complete the 90% design submittal by November 2013
- Complete the Final Design Documents by February 2014
- Complete the Final EIS/EIR by April 2014
- Complete the acquisition of Phase 1 right-of-way (approx. 35 parcels) by May 2014
- Continue with the acquisition of Phase 2 right-of-way (approx. 111 parcels) by May 2015

Opportunities and Challenges

The significant challenge faced by the Upper Llagas Creek Project is the lack of Federal funding. For this Project to be completed, with an estimated cost currently at $134 million, using only local funding is a difficult challenge without federal assistance.

1.2 Sediment removal to preserve flood protection capacity of creeks.

The goal of the sediment removal and maintenance of newly improved creeks is to maintain at least 90% of improved channels at design capacity. The Program pays for the removal of 10% of the total cubic yards removed. The average annual total sediment removal was projected to be approximately 80,000 cubic yards, or programmatically 8,000 cubic yards. This year 3,864 cubic yards were removed with program funds. To date, the Program has funded removal of 66,098 cubic yards.

Over the past few years, Santa Clara County has experienced less intense storms, therefore, less sediment has deposited in streams that needs removal. The objective of sediment removal is to maintain a stream's designed water carrying capacity. This capacity has been maintained, although the amount of sediment removal was less than the annual estimation of the program or 8,000 cubic yards.

Removal challenges included the following: access and staging areas for equipment; nesting birds or other environmental restrictions; staff; weather; equipment availability; contaminated sediment and permit restrictions.

Significant Accomplishments 2001-2013

With the initial launch of the CSC program a significant amount of sediment was removed (14,700 cubic yards) in 2001-2002, due to the accumulation of deferred work.

Planned Activities for FY14

The CSC program is targeting the removal of 3,080 cubic yards from five sites.

Opportunities and Challenges

FY14 sediment removal quantities may be lower than estimated due to regulatory permits. Several sediment removal projects proved to be challenging. For example, the 49er construction project adjacent to our sediment project at San Tomas Creek upstream Tasman, entailed complex coordination with the major development agency responsible for 49er stadium project. In addition, the creek conditions on Lower Silver Creek make removing sediment a challenge since high groundwater conditions continuously add water to the dredging operations work area. This additional water requires a higher level of monitoring and the use of more intensive and costly, water diversion techniques.

Outcome 2: There is clean, safe water in our creeks and bays.

2.1 Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds

The District met its commitment to reduce pollutants from urban runoff in the Uvas/Llagas watersheds by providing assistance to south county cities Morgan Hill and Gilroy for implementation of pollution prevention measures.

Significant Accomplishments 2001-2013

- Since FY 2002, the District entered into a grant funding partnership agreements with south county cities, Gilroy and Morgan Hill, to reduce pollutants from urban runoff to south county creeks

  Funds provided under these agreements were used to supplement City urban runoff pollution prevention activities such as, storm water inspections, storm water pollution prevention plans for city facilities, surface water protection Best Management Practices (BMPs), public outreach, educational programs, storm drain inlet stenciling, and maintain-a-drain programs. In addition both cities organized volunteer litter clean-up activities along local channels. An average of 18 tons of solid waste was removed every fiscal year from South County water courses
- $22,500 was awarded as grant money towards pollution prevention in South Santa Clara County

Planned Activities for FY14

The following are the milestones for Safe Clean Water projects B2 and B3 in FY 2014.

Inter Agency Urban Runoff Program (Project B2)

1. Develop and submit FY 2013 Annual Report of Pollution Prevention Activities by September 15, 2013 (completed)
2. Provide payment of District Contribution to the SCVURPPP Program by August 31, 2013 (completed)
3. Identify installation locations and install 2 (two) trash boom devices or 4 (four) trash net devices or a combination of the two by June 30, 2014 (2 complete)
4. Compile a summary report of operation and maintenance activities and trash volume collected for FY 2013 for the Annual Report by June 30, 2014
5. Provide information for annual Safe, Clean Water and Natural Flood Protection (SCW) report by June 2014

Pollution Prevention Grants and Partnerships (Project B3)

1. Present priority themes for grants and partnerships for the first 5-year implementation plan to the Board for approval by June 30, 2014 (completed)
2. Solicit grant and partnership proposals by September 2013 (completed)
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by June 30, 2014

Opportunities and Challenges

This outcome has been on track and has met the Clean, Safe Creeks KPI of reducing urban runoff pollutants by implementing pollution prevention by entering into partnerships with the south County cities over the life of the program. Going forward, these activities will be transitioned into Safe Clean Water Priority B (Reduce toxins, hazards and contaminants in our waterways) projects, B2 and B3.

2.2 Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds

The District met its commitment, 100% percent of the time, to respond within 2 hours to hazardous material requests in the Uvas/Llagas watersheds. Under Safe, Clean Water, the District will expand its response to 100% of hazardous materials reports requiring urgent on-site inspection, in two hours or less, from the Uvas/Llagas watershed to countywide.

Significant Accomplishments 2001-2013

- The Emergency Response Team responded to 1,392 reports of pollutants in Santa Clara County creeks and reservoirs, with 106 of those being in the Uvas/Llagas watershed
- The Emergency Response Team met the 2-hour on-site response time for urgent incidents over 98% of the time countywide

Planned Activities for FY14

The planned activities for this project that support the Safe, Clean Water KPI for FY14 is to respond to 100% of hazardous materials reports requiring urgent on-site inspection in two hours of less.

Opportunities and Challenges

This project is on track and has consistently met its KPI over the 12 years span of Clean, Safe Creeks. This program will be continued under the Safe, Clean Water Program with scope expanded to extend the KPI to all responses countywide.

2.3 Impaired water bodies improvement

The District has taken several measures to reduce impairments of water bodies, particularly through its support of the Santa Clara Valley Urban Runoff Pollution Prevention program (SCVURPPP) and through its efforts related to mercury remediation. In FY 08, treatment systems (solar bees) to reduce mercury in fish were installed in four reservoirs and one lake. Since FY 12, advanced, upgraded, oxygenation systems have been installed at Calero, Guadalupe, and Stevens Creek reservoirs. In FY 2014, the District has scheduled installation of an oxygenation system at Almaden reservoir. The oxygenation systems provide better mercury treatment at the reservoir base, closer to mercury contamination. Water quality monitoring will continue to determine if the new treatment systems are effective in controlling mercury contamination.

The total maximum daily load (TMDL) describes the maximum amount of pollutants a water body can receive while still meeting water quality standards. The San Francisco Bay Regional Water Quality Control Board (Regional Board) has established a TMDL for mercury contamination in the Guadalupe Watershed. This TMDL requires the District to take remedial actions to restore beneficial uses, which were implemented under this outcome. In FY12, the IMC acknowledged that the Regional Water Quality Control Board systematically assesses water bodies for new and additional impairments. Through this continued assessment, the Regional Board adds additional creeks to the list of impaired water bodies which has increased over the course of this Program.

Significant Accomplishments 2001-2013

- Removed nearly 2000 kg of mercury from the Guadalupe watershed
- Installed and operated treatment systems for mercury in four reservoirs and one lake
- Conducted water quality monitoring at 4 reservoirs

- Upgraded treatment systems at 3 reservoirs based on monitoring results
- Support provided to the City of San José to help address the water quality impacts of illegal homeless encampments on streams

Planned Activities for FY14

- Operate and maintain treatment systems in Calero, Stevens Creek, and Guadalupe reservoirs
- Install treatment system in Almaden Reservoir
- Prepare bi-annual report to Regional Board by December 31, 2013
- Prepare draft 5-year implementation plan for prioritization of pollution prevention and reduction activities
- Prepare one-year annual status report to District Board of Directors

Opportunities and Challenges

In retrospect, the 15-year KPI of reducing or preventing impairment of water bodies in Santa Clara County by demonstrating the charge in the number and type of impaired water bodies was extremely difficult to achieve without the ability to regulate land use activities leading to non-point source discharges. Safe Clean Water is an opportunity to try new innovative technologies to improve water quality and enhance environmental benefits. Under Safe Clean Water, this activity will be continued under project B1 (Impaired Water Bodies Improvement), with expanded KPI's.

2.4 Neighborhood creeks frequently inspected and cleaned of litter and graffiti

The District met its obligation of conducting 4 major cleanup events per year. A clean up event is defined as a route consisting of sites that have been identified as high priority needing continuous litter and graffiti removal. The District met its 5-day response goal in contacting the public regarding any requests for service.

Significant Accomplishments 2001-2013

District staff assesses waterways and generates work orders to address priority areas of concern, which is in addition to public requests. The 12 year performance is summarized as follows:

- Public requests totaling 7,304
- Annual response time ranged from 94% to 100%
- Removal of 5,803 cubic yards
- Removal of 4,143,569 square feet of graffiti

The number of work orders has increased over the years and is attributed to three factors: (1) the ease of reporting (2) the increase in issues due to population growth (3) a combination of these first two elements.

Planned Activities for FY14

Conduct 4 clean up events and respond to the public service requests within 5 days.

Opportunities and Challenges

The District will keep to the number of creek clean up events as specified events in the measure. Staff anticipates that the gap in timeline between clean up events may trigger phone calls by residents for more frequent clean ups.

This Activity will be replaced by Safe, Clean Water program project B4 — Good Neighbor Program: Illegal Encampment Cleanup and project B6 — Good Neighbor Program: Remove Graffiti and Litter, which have similar and expanded KPIs. The KPIs for project B6 are to:

- Conduct 60 cleanup events (4 per year).
- Respond to requests on litter or graffiti cleanup within 5 working days.

Added KPI's for B4:

- Perform 52 annual cleanups for the duration of the Safe, Clean, Water program to reduce the amount of trash and pollutants entering the streams

2.5 Partnership with the County on general surface water quality protection program/outreach

The District fulfilled its promise to the voters to achieve reductions of pollutants in surface water in FY13 through continued partnerships with the Santa Clara County's Green Business Program, SCVURPPP, and a new partnership with the City of San José for trash clean-up at illegal encampments.

Significant Accomplishments 2001-2013

- Since 2001, District entered into agreements with Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) to fund urban runoff activities in Santa Clara County under the Clean, Safe Creeks and Natural Flood Protection Program
- In 2001, District entered into agreement with Silicon Valley Pollution Prevention Center to reduce pollutants in Santa Clara County Creeks
- The District has complied with the Municipal Regional Permit (MRP) requirements taking measures to reduce surface water pollution
- Since 2004, the District has entered into 5 Grant Funding Agreements with County of Santa Clara's Integrated Waste Management Division to support their Green Business Program
- Since 2011, District has carried out 2 grant cycles that included components to benefit Activity 2.5. A total of $178,662 was awarded for five (5) pollution prevention projects
- In Fiscal Year 12, District entered into Trash Prevention and Removal Memorandum of Agreement (MOA) with City of San José/U.S. EPA on Clean Creeks and Healthy Communities to reduce trash resulting from illegal encampments

Planned Activities for FY14

The following are the milestones for project B2 and B3 in FY 2014.

Inter Agency Urban Runoff Program (Project B2)

1. Develop and submit FY 2013 Annual Report of Pollution Prevention Activities by September 15, 2013 (completed)
2. Provide payment of District Contribution to the SCVURPPP Program by August 31, 2013 (completed)
3. Identify installation locations and install 2 (two) trash boom devices or 4 (four) trash net devices or a combination of the two by June 30, 2014 (2 installed)
4. Compile a summary report of operation and maintenance activities and trash volume collected for FY 2013 for the Annual Report by June 30, 2014
5. Provide information for annual Safe Clean Water annual report by June 2014

Pollution Prevention Grants and Partnerships (Project B3)

1. Present priority themes for grants and partnerships for the first 5-year implementation plan to the Board for approval by June 30, 2014 (completed)
2. Solicit grant and partnership proposals by September 2013 (completed)
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by June 30, 2014

Opportunities and Challenges

This outcome has been on track and has met the Clean, Safe Creeks KPI of assisting Santa Clara County and other cities in reduction of pollutants in surface water by entering into partnerships with the County and various organizations over the life of the program. Going forward, these activities will be transitioned into Priority B projects, B2 and B3 of Safe, Clean Water.

Outcome 3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Santa Clara Valley Water District Board of Directors.

3.1 Vegetation management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks

During FY13 (year twelve of the Program), the District met the annual goal of 1,466 acres of vegetation management. Cumulatively over the first twelve years of the program the District has managed 19,638 acres, exceeding the target to date of 17,592 acres. With this trend set to continue, the fifteen year target of 22,000 acres would be met sometime in FY15, accomplishing the program goal over a year ahead of schedule. Work on this outcome will continue under Safe, Clean Water.

Significant Accomplishments 2001-2013

Program accomplishments include annual maintenance on:

- 619 acres of vegetation management for flow conveyance
- 364 acres of revegetation maintenance
- 438 acres of maintenance access work to allow these activities to be completed

Planned Activities for FY14

- Annual pruning of overhanging growth from adjacent properties on approximately 45 acres to provide clearance for maintenance access
- Mechanical mowing of slopes on approximately 363 acres
- Completion of supplemental irrigation on sites within the project defined establishment period by October 3
- Completion of site monitoring by February 15
- Completion of replacement plantings identified in the previous fiscal year's monitoring report by March 15
- Completion of plant basin maintenance and dri-water installation by May 15
- Completion of an average of 470 acres of Aquatic Herbicide applications by October 15
- Completion of an average of 30 acres on in stream mechanical mowing on Guadalupe River by November 1
- Completion of an average of 119 acres of in stream vegetation removal (hand labor) by March 1

Opportunities and Challenges

The twelve year target for the program was met and exceeded. Challenges for the future include environmental regulatory issues and resource issues available to accomplish the KPI's under SCW.

3.2 Community partnerships to identify and implement restoration of fisheries, riparian habitat or wetlands

The District has exceeded the Program goal of 100 acres of environmental restoration through both the planning and implementation of environmental enhancement grant projects. Through June 2013, 608.64 acres have been created or restored. The primary focus within this activity for FY13 was on the implementation of previous Board approved projects as well as development of the 2013 Comprehensive Stewardship Grant Program, which included funding for enhancement-related projects.

Significant Accomplishments 2001-2013

- Carried out 4 grant cycles that included components to benefit Activity 3.2
- Of the 6 planning projects funded through 2010 grants, 4 proponents successfully returned to the District for 2011 implementation grant funding
- In addition to creating or restoring tidal and riparian habitat, focus was placed on protection for endangered species; removal of fish migration barriers and installation of fish ladders; revegetation of native plant species; and removal of non-native, invasive species

Through FY2013, 18 of 36 Board approved grant projects have been completed. Completed projects include (project name/acres completed/grantee or partner):

- Island Ponds Tidal Wetland Restoration Project (299 ac) (SCVWD/USFWS)
- Palo Alto Flood Basin Phragmites Removal Project (7 ac) (SCVWD/City of Palo Alto/CA Native Plant Society/Save The Bay)
- Pond A8 Tidal Wetland Restoration (200 ac) (SCVWD/USFWS/CA Coastal Conservancy)
- Vegetation Management in South Bay Salt Pond's (SBSP's) Alviso Unit (Pond A6) planning project (0 acres) (SF Bay Wildlife Society)
- Vegetation Management in South Bay Salt Pond's (SBSP's) Alviso Unit (Pond A6) implementation project (13 acres) (SF Bay Bird Observatory)
- Lower Silver Creek Flood Protection Project Enhancements (5 acres) (SCVWD)
- Upper Pajaro Watershed Vegetated Buffer Strip Project (2.5 acres) (SCVWD)
- Palassou Ridge Wetland Management Project (40 ac) (SCVWD)
- Stevens Creek Corridor Restoration Project (Blackberry Farm) Phase 1 (4 acres) (SCVWD/City of Cupertino)
- Adobe Creek Upper Reach 5 Restoration Project (0.69 ac) (SCVWD)
- Tick Creek Riparian Enhancements (2.3 acres) (SCVWD)
- Guadalupe Creek Cape Ivy Control (9.18 acres) (SCVWD)
- Soap Lake Floodplain and Riparian Easement Property Acquisition (25 acres) (SCVWD)
- Adobe Creek Restoration Project at Edith Park (0.32 acres) (Town of Los Altos Hills)
- Llagas Creek Enhancement Proposal (City of Morgan Hill)
- Adobe Creek Restoration Plan at Redwood Grove (Acterra)
- Little Arthur Creek Streamflow Stewardship Project (Trout Unlimited)
- Guadalupe River Aquatic Enhancement Program (0.65 acres) (SCVWD)

Planned Activities for FY14

Project D2

1. Determine which stream corridor priority plan provides the most invasive plant removal benefit by December 30, 2013
2. Develop two plant palattes by June 30, 2014
3. Create list of viable community partnerships to carry out project goal by March 30, 2014

Project D3

1. Present priority themes for grants in FY14 to the Board for approval by August 2013.
2. Solicit grant and partnership proposals by September 2013
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by November 30, 2014

Project D4

No FY14 milestones. Work to begin in FY15.

Project D6

No FY14 milestones. Work to begin in FY18.

Opportunities and Challenges

Activity 3.2 is complete following the twelfth year of the program. Board approved projects which are still pending completion will continue to be implemented with an expected completion date of June 30, 2016.

Challenges moving forward as Safe, Clean Water is implemented include:

- Integrating enhancements and stewardship into other District operations and project activities

Outcome 4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate.

4.1 Provide additional trails and open space along creeks and in watersheds.

Through June 2013, the trails program has achieved 70.89 miles of public access to trails; this exceeds the program's goal of 70 miles of trails and open space by FY16.

Significant Accomplishments 2001 - 2013

- Carried out 5 grant cycles that included components to benefit Activity 4.1
- Created public access to over 70 miles of trail
- Funded projects were distributed geographically across Santa Clara County, with between 6 and 12 projects in each major watershed

Through FY2013, 43 of 50 Board approved trail and open space projects have been completed with Clean Safe Creeks funding. Of these 43 projects, 22 were completed with grant funding and the remainder through joint use and joint trail agreements. A list of completed grant related projects can be found in Table 4.1.

Planned Activities for FY14

Project D3

1. No FY14 milestones. Trail grant opportunity and related milestones scheduled for FY15

Opportunities and Challenges

Outcome 4.1 is complete following the twelfth year of the program. Board approved projects which are still pending completion will continue to be implemented with an expected completion date of June 30, 2016.

Challenges moving forward as Safe, Clean Water is implemented include:

- Placement of trails along creeks and in the watersheds must consider ecological values in their development (e.g., increased pedestrian traffic in the riparian corridor may adversely impact wildlife)
- Public concern about trail alignments may prove inconsistent with trail objectives (i.e. public concern of where they do not wish to see a trail located too close to their property)

Table 4.1 | Outcome 4 Trail and Open Space Completed Projects

Project	**Grantee Organization**	**Watershed**	**Public Access Provided** (miles of trails)
Enhancement of the South Page Ponds Groundwater Recharge Facility	Campbell	Guadalupe	0.32
Coyote Lake — Harvey Bear Ranch County Park Phase 1 Trails Master Plan Implementation	County	Coyote	16
Coyote Creek Trail County Park — Hellyer Gap Trail Improvement Project	County	Coyote	0.5
Steven's Creek Trail — Habitat Protection and Historic Preservation of De Anza Knoll	County	Lower Penitencia	2
Steves Creek Corridor Trail — Phase 1	Cupertino	Lower Penitencia	0.75
Completion of the Bay Trail (Environmental Volunteers)	Environmental Volunteers, Inc.	Lower Penitencia	0.1
Lions Creek Trail (City of Gilroy)	Gilroy	Uvas-Llagas	0.61
Berryessa Creek Trail, Reach 3 (Complete from Abel Street to Town Center-Hillview)	Milpitas	Coyote	1.5
Coyote Creek Trail, Reach 1 Staging Area (complete from Dixon Landing Rd. to Ranch Dr.)	Milpitas	Coyote	1.75
Coyote Creek Trail, Reach 1 Stage Area (additional mileage added to Dixon to Ranch alignment)	Milpitas	Coyote	0.45
Alviso Adobe Renovation (City of Milpitas)	Milpitas	Coyote	0.25
Morgan Hill Wildlife Trail (Edmundson Ave. to Edes Court)	Morgan Hill	Uvas-Llagas	0.2
Madrone Channel Trail (City of Morgan Hill)	Morgan Hill	Uvas-Llagas	3
Stevens Creek Trail — Reach 4, Segment 2 North (Yuba Dr to El Camino Real)	Mt. View	Lower Pen	0.5
Stevens Creek Trail (City of Mountain View)	Mt. View	Lower Penitencia	0.5
Permanente Creek Trail (City of Mountain View)	Mountain View	Lower Penitencia	0.5
Selma Olinder/Coyote Creek Trail (Coyote Creek at E. Williams St.)	San José	Coyote	0.5
Dobern Bridge/Lower Silver Creek Trail (Dobern Ave to Bambi Lane)	San José	Coyote	0.25
Three Creeks Trail, Trestle and Interim Improvements (City of San José)	San José	Guadalupe	0.9
San Tomas Aquino Creek Trail, Reach 1 and 2 (237 to Agnew) (Agnew to South)	Santa Clara	West Valley	2.6
San Tomas Aquino Creek Trail, Reach 3-5 (Scott to Bollinger)	Santa Clara	West Valley	6.89
Calabazas Creek Trail (Mission College to Old Mtn View Rd.)	Sunnyvale	West Valley	1.5
		Grants Subtotal	**41.57**
		Joint Use & Joint Trail Agreements Subtotal	**29.32**
		GRAND TOTAL (FY2001-2013)	**70.89**

Outcome 1

Homes, schools, businesses and transportation networks are protected from flooding

Outcome 1 of the Clean, Safe Creeks and Natural Flood Protection Program (Program) is designed to protect homes, schools, businesses and transportation networks from flooding.

1.1 Provide flood damage reduction by increasing the stream's ability to convey the 100-year flow.

Fifteen-Year Key Performance Indicators (KPI)

Permanente Creek (San Francisco Bay to El Camino Real)

- Flood damage reduction for 1,664 parcels that include: 1,378 homes, 160 businesses and 4 schools institutions

San Francisquito Creek (San Francisco Bay to Searsville Dam)

- Planning study and design of an engineering plan to provide flood damage reduction for 3,000 parcels

Sunnyvale West Channel (Guadalupe Slough to Hwy 101)

- Flood damage reduction for 11 parcels by increasing the creek's ability to convey the 100-year storm flow

Calabazas Creek (Miller Avenue to Wardell Road)

- Flood damage reduction for 2,483 parcels that include: 2,270 homes, 90 businesses, and 7 schools/institutions

Sunnyvale East Channel (Guadalupe Slough to I-280)

- Flood damage reduction for 1,618 parcels that include: 1,450 homes, 95 businesses, and 4 schools/institutions

Upper Guadalupe River (I-280 to Blossom Hill Road)

- Using only local funding, a reduced project would extend from Hwy 280 to Curtner Avenue. Frequency of flooding would be reduced, however parcels in the flood plain would still be subjected to flooding from upstream sources
- Local and federal funding for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions

Berryessa Creek (Lower Penitencia Creek to Old Piedmont Road)

- Using only local funds, a reduced project would extend from the confluence with Lower Penitencia upstream to Montague Expressway, modifying 3 miles of channel and protecting approximately 100 parcels
- Local and federal funding for flood damage reduction for 1,814 parcels including 1,420 homes, 170 businesses, and 5 schools/institutions

Coyote Creek (Montague Expressway to I-280)

- Planning study, design, and partial construction (to the extent allowed by available funding) of an engineering plan to provide flood damage reduction

Upper Llagas Creek (Buena Vista Avenue to Wright Avenue and West Little Llagas)

- Local funding only would include 3.25 miles of channel construction, including a 1-mile diversion. This would provide protection from a 10-year flood event for some agricultural land, leaving areas of Morgan Hill exposed to flooding
- Local and federal funding for flood damage reduction combined would include: 1,397 parcels comprised of 820 homes, 200 businesses, 190 agricultural parcels, and 6 schools/institutions

1.2 Sediment removal to preserve flood protection capacity of creeks

- Remove approximately 120,000 cubic yards of sediment from unimproved creeks

1.3 Maintenance of newly improved creeks

- Preserve flood protection capacity for 46 miles of newly improved creeks maintained (vegetation control and sediment removal)

Activity 1.1

Provide flood damage reduction by increasing the stream's ability to convey the 100-year flow.

Fifteen-Year Goal

Contingent upon full state and federal funding, protect up to 15,976 parcels through the completion of up to nine new flood protection projects, including seven construction projects, one planning/design/partial construction project, and one planning/design project. Three of the seven construction projects are dependent on Federal funding for completion of flood improvements; the current estimate of targeted parcels, with partial federal funding, is 10,171 parcels to be protected by December 2016. This reflects the delay and uncertainty in the availability of state and federal funds, compared to what was anticipated in 2000.

In the original Program Plan, the total project cost for all nine projects was $328.4 million, of which the federal contribution was anticipated to be $83.7 million, or 25.5% of the total project cost. Although reduced federal funding may delay completion of three of the Program's projects, the District will continue to pursue these funds.

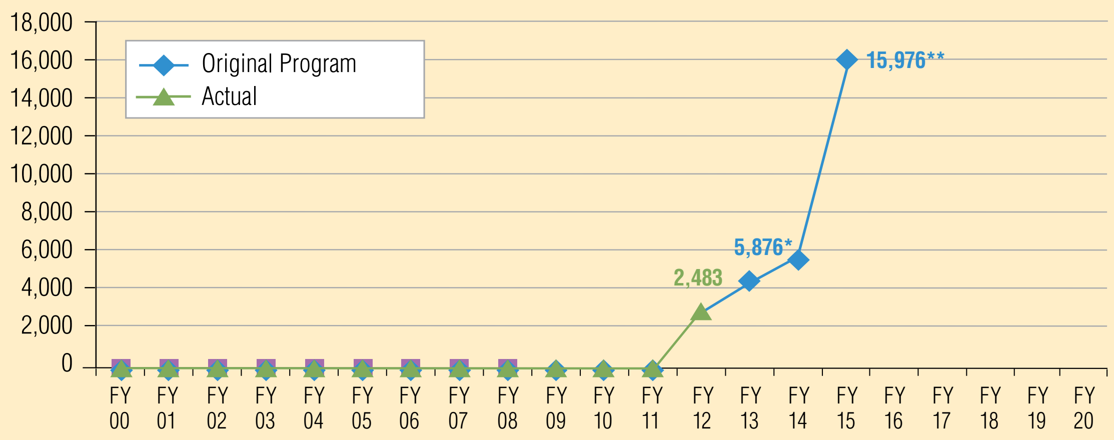
How This Activity Will Be Measured

This activity was measured by yearly progress of parcels protected in comparison to the Program schedule that was submitted to the voters. Additionally, the amount of funding expended for each project was tracked annually.

Federal and State Funding

For projects that are federally funded, the Corps performed the planning, design, and construction, while the local sponsor, i.e., District, obtained all the rights-of-way, utility relocations, and any hazardous material clean-ups that are required. The District work is eligible for 70% reimbursement from the state on all Corps projects, with the exception of Upper Llagas Creek which was eligible for 100% reimbursement. This reimbursement is known as State subventions and provided additional dollars to these Federal projects. Therefore, working in partnership with the Corps has the benefit of creating another source of funding for these large projects.

Graph 1.1 | Program Graph Showing Number of Parcels Protected From Flooding

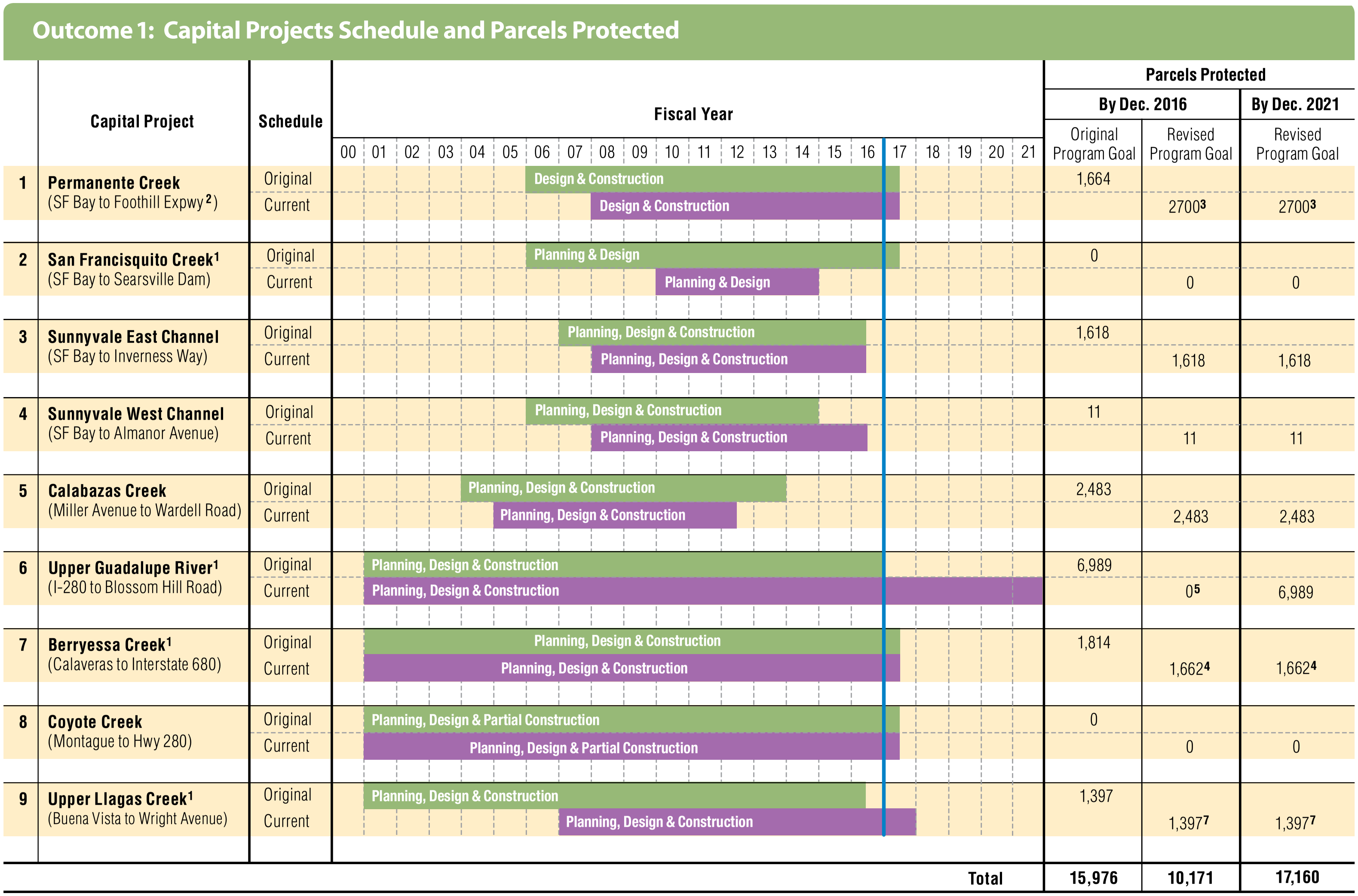


* *5,876 parcels to be protected with no federal funding*

** *15,976 parcels to be protected with full state and federal funding*

Capital Program Schedule

Clean, Safe Creeks and Natural Flood Protection Program



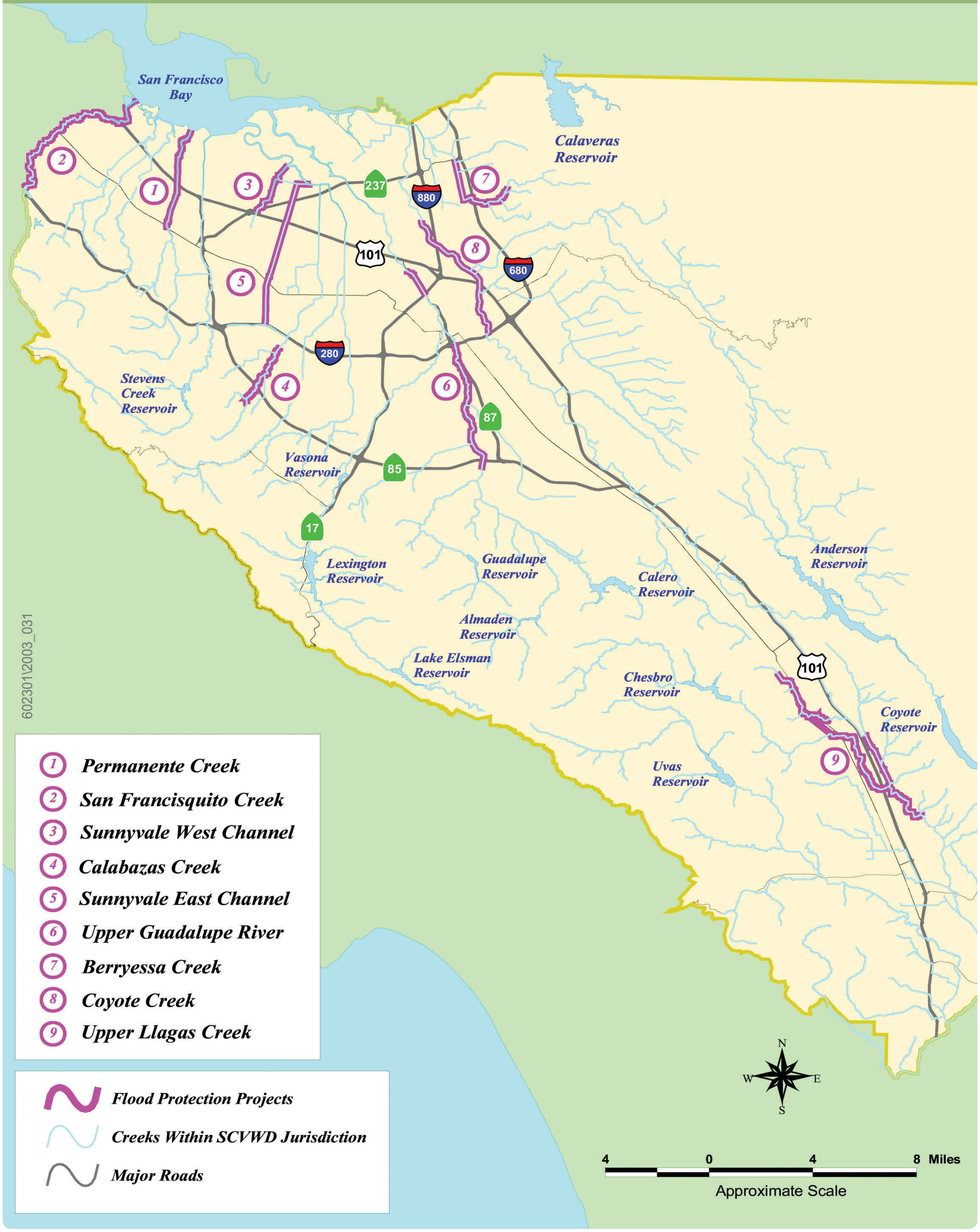
Outcome 1: Capital Projects Schedule and Parcels Protected

	Capital Project	Schedule	Fiscal Year (00–21)	Parcels Protected By Dec. 2016 Original Program Goal	Parcels Protected By Dec. 2016 Revised Program Goal	Parcels Protected By Dec. 2021 Revised Program Goal
1	**Permanente Creek** (SF Bay to Foothill Expwy[2])	Original	Design & Construction	1,664		
		Current	Design & Construction		2700[3]	2700[3]
2	**San Francisquito Creek[1]** (SF Bay to Searsville Dam)	Original	Planning & Design	0		
		Current	Planning & Design		0	0
3	**Sunnyvale East Channel** (SF Bay to Inverness Way)	Original	Planning, Design & Construction	1,618		
		Current	Planning, Design & Construction		1,618	1,618
4	**Sunnyvale West Channel** (SF Bay to Almanor Avenue)	Original	Planning, Design & Construction	11		
		Current	Planning, Design & Construction		11	11
5	**Calabazas Creek** (Miller Avenue to Wardell Road)	Original	Planning, Design & Construction	2,483		
		Current	Planning, Design & Construction		2,483	2,483
6	**Upper Guadalupe River[1]** (I-280 to Blossom Hill Road)	Original	Planning, Design & Construction	6,989		
		Current	Planning, Design & Construction		0[5]	6,989
7	**Berryessa Creek[1]** (Calaveras to Interstate 680)	Original	Planning, Design & Construction	1,814		
		Current	Planning, Design & Construction		1,662[4]	1,662[4]
8	**Coyote Creek** (Montague to Hwy 280)	Original	Planning, Design & Partial Construction	0		
		Current	Planning, Design & Partial Construction		0	0
9	**Upper Llagas Creek[1]** (Buena Vista to Wright Avenue)	Original	Planning, Design & Construction	1,397		
		Current	Planning, Design & Construction		1,397[7]	1,397[7]
			Total	**15,976**	**10,171**	**17,160**

🟩 2000 project schedule 🟪 2013 project schedule Construction shown does not include landscape establishment period of 3 years

Notes:
1 U.S. Army Corps of Engineers Partner Project
2 Construction planned only to El Camino Real
3 Permanente Creek Project: Upstream detention basins increased protected parcels
4 Berryessa Creek Project: Parcel change based on U.S. Army Corps of Engineers' re-evaluation of project study area and cost/benefit ratio
5 Upper Guadalupe River Project: Flood protection cannot be achieved until completion of the entire project in 2021. On March 22, 2011, the Board approved a transfer of $9.5 million from the Program funds to complete the design and begin construction of Reach 12 in June 2012.
6 If federal funding is delayed for an extended period of time on any of the federal cost share projects, environmental documents may become obsolete and require revision.
7 Upper Llagas Creek Program goal is completion of the Reach 4 and Reach 7a construction (Phase 1 construction) which will provide no increased level of flood protection. Only after Phase 2 construction is completed (currently in jeopardy due lack of federal funding) will Project's flood protection goals be realized.

Clean, Safe Creeks and Natural Flood Protection Program Flood Protection Projects



Permanente Creek Flood Protection Project

The Permanente Creek watershed encompasses 28 square miles, including portions of the cities of Los Altos, Mountain View, Cupertino, Los Altos Hills, and Palo Alto.

Project improvements would be constructed in several places along Permanente Creek, from south of Foothill Expressway to north of Amphitheatre Parkway and along Hale Creek from Foothill Expressway to the confluence with Permanente Creek. The Project includes the following components:

- A 15-acre flood detention basin at Rancho San Antonio County Park
- A 5-acre flood detention basin occupying McKelvey Park
- A new diversion structure to improve the "flow split" at the Permanente Creek Diversion Channel
- Floodwalls and levees along Permanente Creek from U.S. Highway 101 (US-101) to just north of Amphitheatre Parkway
- Replacement of selected concrete portions of Permanente and Hale Creeks with wider and deeper concrete channels

Implementation of the Project would provide 1% flood protection for residents, businesses, and infrastructure along the Permanente Creek corridor in the cities of Mountain View and Los Altos.

The District has completed 90% design for the Permanente Creek channel widening, floodwalls and levees, and the new Diversion Structure. The District has completed 60% design for the Hale Creek channel widening and the Rancho San Antonio flood detention basin project elements. Lastly, the District has prepared preliminary design for the McKelvey Park flood detention basin.

The District prepared a Subsequent Environmental Impact Report (SEIR) for the project, which was certified and approved by the District Board in 2012. The District also reached agreement with the County of Santa Clara and the City of Mountain View for use of their lands to build the two proposed flood detention basins in 2013. Resource agency permit applications have been prepared and will be filed in summer of 2013.

Objectives and Benefits

- Provide flood protection; reduce erosion and sedimentation from the San Francisco Bay to El Camino Real
- Protect a minimum of 1,664 parcels from 100-year flooding (note that actual parcels protected would be approximately 2,720)
- Address the deterioration of aging facilities

Fifteen-Year Key Performance Indicator (KPI)

Flood damage reduction for, 1,664 parcels that include: 1,378 homes, 160 businesses and 4 schools/institutions.

How this Activity is Measured

This activity would be completed when the entire project elements included in the proposed project is built and 1664 parcels have been protected from 100-year flooding.

Program Allocation and Project Cost

Permanente

Total anticipated allocation: $40.6 million ($27.4 million in 1999 dollars escalated at 3% per year)

The actual cost to date for this project is $7.5 million. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in Safe, Clean Water annual reports beginning in the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13

The project is currently in detailed design phase. The various project elements' status is listed below:

- Rancho San Antonio detention: 60% design. Agreement with County of Santa Clara for use of the site was completed in June 2013
- McKelvey Park detention: Preliminary design. Agreement with City of Mountain View for use of the site was achieved in May 2013
- Permanente channel widening, levees and floodwalls, and new diversion structure: 90% design. Plan sets updated. Project specs being prepared in conformance with Subsequent EIR
- Hale Creek channel widening: 60% design. Plans updated to reflect comments from City of Los Altos and residents

Current Performance in FY13 (KPI)

On schedule to meet CSC goals of KPI by FY2016.

Planned and Accomplished for FY13

Planned Activities, Accomplishments, and Status:

Prepare 90% design for Rancho San Antonio detention basin
Not accomplished: design on hold until site agreement was achieved in June 2013.

Prepare Subsequent Environmental Impact Report (SEIR) for the revised project
Accomplished: prepared report was certified and approved by Board November 2012.

Prepare 60% design for the Hale Creek channel improvement
Accomplished: prepared and released for review

Obtain all the required easements
Not fully accomplished: Draft easement agreement prepared and negotiations were initiated with property owners. Several easements obtained. All easements must be obtained prior to commencement of work in 2014

Obtain rights-of-way and maintenance agreements with City of Mountain View and County Parks
Accomplished: Agreements with the City and County achieved in May and June of 2013, respectively.

Apply for environmental permits
Not accomplished: final permit application being prepared.

STATUS — FULL PROGRAM: 2001-2013

Project planning was completed in 2008 with publication of Planning Study Report. Original project EIR was produced in 2009 and certified and approved in 2010. Subsequent EIR was produced, certified and approved in 2012. Detailed project design is in progress.

Cumulative Progress toward KPI (2001-2013)

Project subsequent EIR and planning reports are completed. Agreements for site use for the two detention basin sites are completed. Project design and environmental permits needed prior to project construction start.

Significant Accomplishments (2001-2013)

- Project planning reports completed in 2008
- Project EIR completed in 2010
- Project subsequent EIR completed in 2012
- Agreements for site use for the two detention basin sites are completed in 2013

Challenges to Intended Outcome (2001-2013)

Timeliness of environmental permits may affect meeting KPI by target date of 2016.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is on track to be completed where Clean, Safe Creeks KPIs will be met within first five years of Safe, Clean Water and Natural Flood Protection program.

- KPI: Flood damage reduction for 1,664 parcels

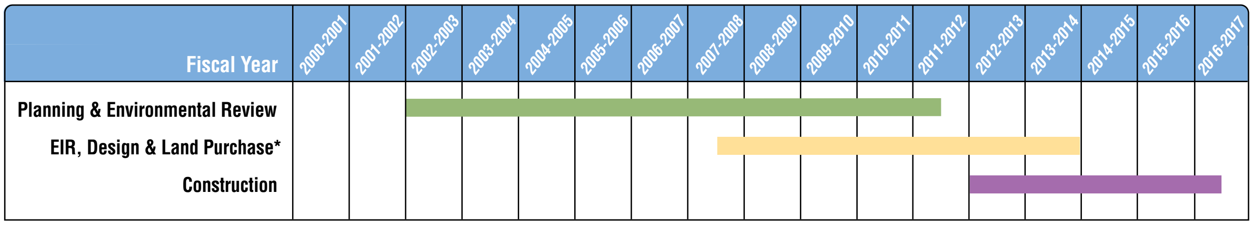
Planned Activities for FY14

- 100% design for Permanente Creek channel widening by December 2013
- 100% design for Rancho San Antonio flood detention by April 2014
- Obtain environmental permits by April 2014
- Obtain remaining easements by January 2014
- Begin construction for Permanente Creek channel widening June 2014

Opportunities and Challenges

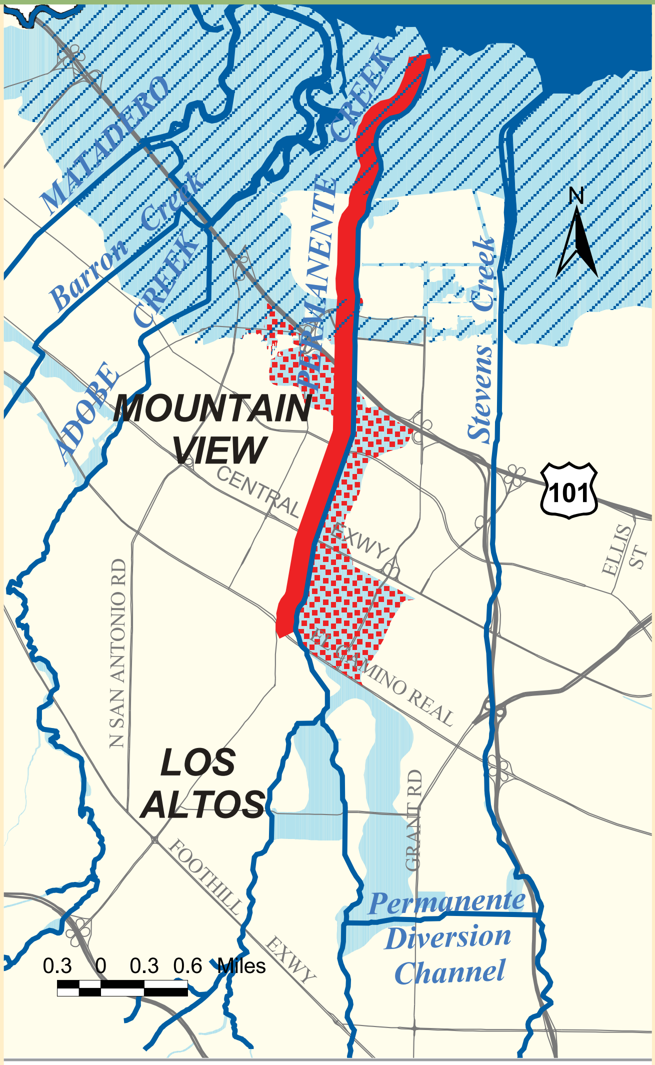
On track to meet CSC goals by CSC target of December 2016.

Current Schedule



**Negotiations to acquire real properties for flood detention basins began in FY11.*

PERMANENTE CREEK



LEGEND

- ● Flood Prone Area
- ▨ Tidal Flood Plain Limits
- ▦ Flood Prone Area Removed by Program
- ▪ ▪ ▪ Planning and Design
- ▬ Flood Damages Reduced

Proposed Project Elements:

- Floodwall construction from HWY 101 to Charleston Road
- Flood-proof wall between Charleston Road and Amphitheater Parkway
- Levee construction downstream of Amphitheater Parkway
- Replacing the aging concrete channel between Mountain View Ave. and Arroyo Drive with a new concrete channel
- Off-stream flood detention basins at Rancho San Antonio and McKelvey Park off Miramonte Avenue
- Upgrade Stevens Creek Diversion Structure
- Trails opportunities between HWY 101 and Middlefield Road has been presented to the Board for consideration

Permanente Creek downstream of Central Expressway.

San Francisquito Creek Flood Protection Project

(Planning and design only)

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek runs along the border between San Mateo and Santa Clara counties and flows through five cities, from Searsville Lake above Stanford University to the San Francisco Bay near the Palo Alto Airport.

No federal funding was received for this project in FY12 and FY13. The Corps has completed preliminary coastal and economics analysis for the project. The Corps' ability to complete the Study has been impacted by unanticipated delays due to federal funding constraints and the Corps processes. To comply with the new Civil Works guidance for feasibility studies, the Corps has begun a study reset process to develop a prioritized list of studies.

On March 27, 2012, the District Board directed the CEO to make project changes to ensure the District meets the Program commitment of completing planning and design in light of the federal funding shortage. Specifically, District staff was directed to incorporate the existing feasibility study work completed by the District, San Francisquito Creek Joint Powers Authority (JPA), and Corps into a District Planning Study Report for the project. In addition, staff will perform design work on common features shared by feasible alternatives including the replacement of the Newell Road, Pope/Chaucer Street, and Middlefield Road bridges as well as channel widening at four bottleneck locations.

The JPA consultants have completed 90% design documents and prepared an Environmental Impact Report (EIR) for the Early Implementation Project (EIP) that extends from the San Francisco Bay to U.S. Highway 101. This EIR was certified by the JPA Board in October 2012.

District staff has completed Planning Study Report and begun preparation of 60% design for floodwall alternative extending upstream from U.S. Highway 101. ($1.9 million expended in FY13)

Objectives and Benefits

- Provide planning and design (not construction) in cooperation with the San Francisquito Creek Joint Powers Authority (JPA) for flood protection and erosion/sedimentation control on San Francisquito Creek from San Francisco Bay to Searsville Dam
- Reduce sedimentation and improve water quality
- Restore ecosystem quality, habitat, and function where possible
- Minimize project impacts on the environment — both long range and during construction
- Identify opportunities to provide for public recreation and access to San Francisquito Creek

Fifteen-Year Key Performance Indicator (KPI)

Planning study and design document to provide flood damage reduction for 3,000 parcels.

How this Activity is Measured

Prepare Planning Study Report and design documents for the 100-year flood protection project.

Program Allocation and Project Cost

Total anticipated allocation: $11.7 million ($8 million in 1999 dollars escalated at 3% per year)

The actual cost to date for this project is $3.2 million. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in Safe, Clean Water annual reports beginning in the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13.

Current Performance in FY13 (KPI)

The Project is currently in design phase. The various project elements' status is listed below:

- Early Implementation Project: 90% design

Planned and Accomplished for FY13

Planned Activities, Accomplishments, and Status:

1. Complete 90% design for the EIP; **Accomplished**
2. Prepare Environmental Impact Report for the EIP; **Accomplished**
3. Prepare Planning Study Report; **Accomplished**
4. Begin preparation of 60% design for floodwall alternative upstream of Highway 101; **Accomplished**
5. Begin Pope/Chaucer Street Bridge design; **Accomplished**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

- Completed Planning Study Report
- Completed the 90% design for the EIP
- Completed and certified the project EIR for the EIP
- Began the design of the Newell Road and Pope/Chaucer Street bridges
- Completed 60% design of the channel improvement for the upstream of the Highway 101
- Began CEQA process for the project upstream of the Highway 101

Significant Accomplishments (2001-2013)

- The Corps completed a reconnaissance study for the Creek
- Authority entered into a Feasibility Cost Share Agreement ("FCSA") with the San Francisco District of the Corps for the Feasibility Study on the Creek
- PA Consultant prepared design documents and an environmental document for the EIP
- District prepared Planning Study Report for the Project

Challenges to Intended Outcome (2001-2013)

The Corps, due to a lack of federal funding, has greatly reduced their project efforts. The project schedule has slipped by approximately three years to date.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity will be carried forward as project E5 within the new Safe, Clean Water and Natural Flood Protection Program. E5 will meet original Clean, Safe Creeks KPIs, but additional Safe, Clean Water funding enables **construction** work. KPI's are below.

1. **With federal and local funding**, protect more than 3,000 parcels by providing 1 percent flood protection
2. **With local funding only**, protect approximately 3,000 parcels from flooding (100-year protection downstream of HWY 101, 50-year protection upstream of HWY 101)

Planned Activities for FY14

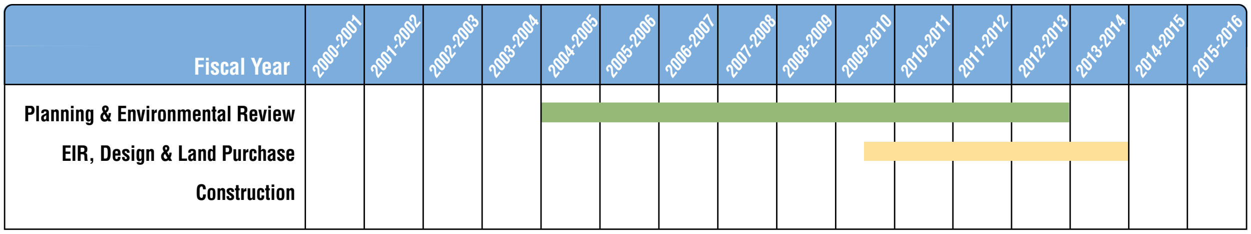
- Prepare final design documents for the EIP
- Acquire regulatory permit for the EIP
- Advertize and award the EIP construction contract
- Prepare 30% and 60% design documents for Pope Chaucer Bridge replacement
- Obtain a design consultant for the Middlefield Rd. Bridge replacement

Opportunities and Challenges

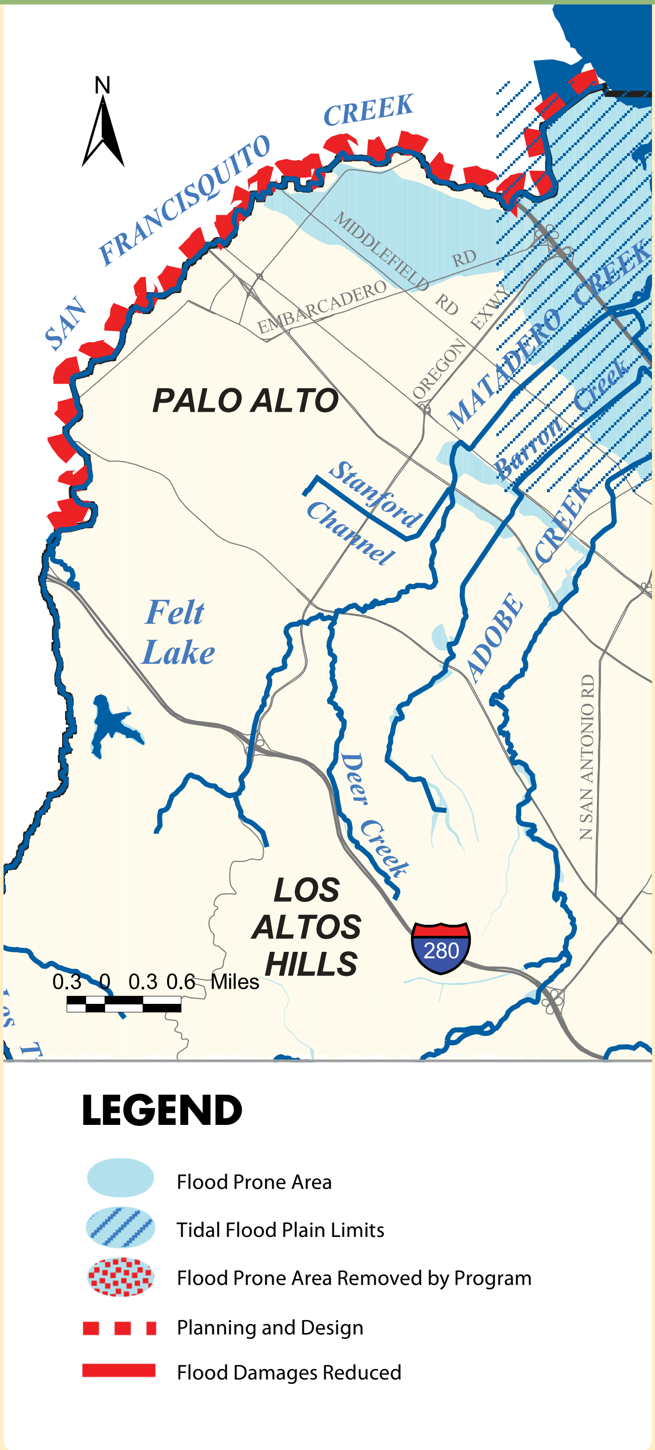
The project is on schedule to complete planning and design. As we transition to the SCW program, challenges include:

- Securing funding to complete construction of Reach 1 (Bay-101)
- Obtaining regulatory permits
- Acquiring all necessary easements in both Santa Clara and San Mateo counties

Current Schedule



SAN FRANCISQUITO CREEK



Project Alternatives to be Evaluated Will Include:

- Raising levees downstream of Highway 101
- Off-stream storage for peak flood flows in upper watershed
- Creek widening to remove constrictions (bottle-necks) to flow
- Bypass channel from University Avenue to Highway 101
- Flood wall construction upstream of Highway 101
- Replacing Newell Road, University Avenue, Pope Chaucer Street, and Middlefield Road bridges

In February 1998, San Francisquito Creek overflowed its banks causing over $28 million in damages.

Sunnyvale East Channel Flood Protection Project

The East Channel extends approximately 6.4 miles and will upgrade existing channel capacity to provide 100-year riverine flood protection for 1,618 parcels.

Project will decrease channel turbidity and sediment by repairing erosion sites, thereby improving water quality. Sunnyvale East Channel Project is combined with Sunnyvale West Channel Project and is scheduled to begin Project construction in summer of 2014 and complete by December 2016.

In June 2012, the District completed a Structural Feasibility Study on the existing Caribbean Road Bridge at Sunnyvale East Channel. The Study indicated this existing Caribbean Road Bridge will need to be replaced as it is not sufficient structurally to support the proposed headwalls necessary to provide flood protection. Initial estimates indicate the replacement bridge or reinforced box culvert for Caribbean Drive will cost an additional $2.0 million to $2.5 million to design and construct, including the cost to relocate existing utilities. The structural design is anticipated to be completed internally by District staff which will allow the project to remain on schedule.

($1.86 million expended in FY13 combined for both the Sunnyvale East and West Channels Flood Protection Project)

Objectives and Benefits

- Provide flood protection on Sunnyvale East Channel from Guadalupe Slough to Interstate 280
- Protect 1,618 parcels from 100-year riverine flooding
- Erosion reduction measures to improve stream water quality

Fifteen-Year Key Performance Indicator (KPI)

Flood damage reduction for 1,618 parcels that include: 1,450 homes, 95 businesses, and 4 schools/institutions

How This Activity is Measured

Activity is measured by how many parcels are protected (1,618 parcels) from 100-year riverine flooding as a result of the completed Project.

Program Allocation and Project Cost

Total anticipated allocation: $35.4 million ($24.1 million in 1999 dollars escalated at 3% per year)

The actual cost to date is $9.7 million (Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13.

Current Performance in FY13 (KPI)

The 60% design submittal and the EIS/EIR Administrative Draft were completed during FY13. The Project has a very aggressive schedule, but remains on schedule.

Planned and Accomplished for FY13

Planned Activities, Accomplishments, and Status:

1. Complete 60% design submittal; **Accomplished**
2. Complete Internal Draft Environmental Impact Report; **Accomplished**
3. Complete Hydraulic Analysis; **Accomplished**
4. Complete concrete floodwall designs; **Accomplished**
5. Complete Caribbean Drive triple cell reinforced concrete box (RCB) to replace existing Caribbean Bridge; **Accomplished**
6. Complete 90% design submittal; **On Schedule**
7. Coordinate with the various Utility Companies, including PG&E all the relocations needed for the project; **On Schedule**
8. SCVWD Board certifies the Project EIS/EIR in March 2014; **On Schedule**
9. Complete Final Plans and Specifications by March 2014; **On Schedule**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Project planning efforts (Planning Study Report), which considered many different Project alternatives, were completed during the full program. Project moved into the design phase in 2011, where design completion is expected to occur in FY14.

Significant Accomplishments (2001-2013)

- Completed 30% design submittal
- Executed an Environmental Consultant Contract to Prepare Project Environmental Impact Report
- Completed Hydraulic Analysis
- Completed Structural Feasibility Report of existing bridge/culvert crossings to analyze whether the existing structures can support proposed headwalls
- Analyzed Caribbean Bridge Replacement alternatives
- Completed 60% design submittal
- Complete Internal Draft Environmental Impact Report

Challenges to Intended Outcome (2001-2013)

The significant challenge is to complete the replacement of the existing Caribbean Drive Bridge with a new triple cell box culvert. The Project team has asked the City of Sunnyvale to consider allowing a complete closure of Caribbean Drive to avoid a two year construction window, expensive detours and lane closure, public safety, etc. that are involved with a partial closure. The City of Sunnyvale has requested a traffic study be completed to justify a full closure of Caribbean Drive. SCVWD staff has hired a traffic consultant in July 2013 to complete the required study by the City of Sunnyvale.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is on track to be completed as part of Safe, Clean Water and Natural Flood Protection program. The KPI's will be met within the first five years of the program. KPI's under Safe, Clean Water and Natural Flood Protection program are below.

- KPI: Flood damage reduction for 1,618 parcels (Sunnyvale East)

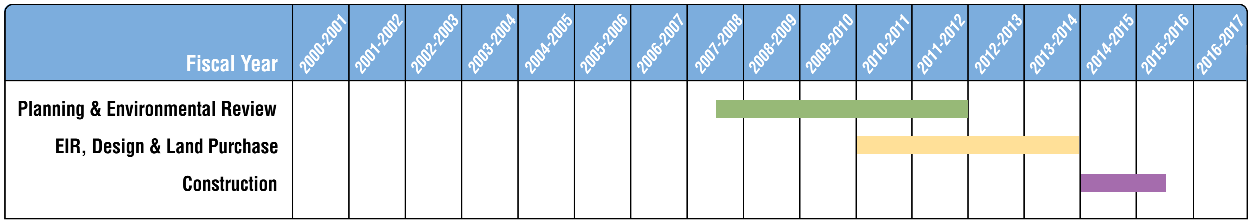
Planned Activities for FY14

- Complete 90% design submittal
- Coordinate with the various Utility Companies, including PG&E on all the relocations needed for the project
- SCVWD Board certifies the Project EIS/EIR in March 2014
- Complete Final Plans and Specifications by March 2014

Opportunities and Challenges

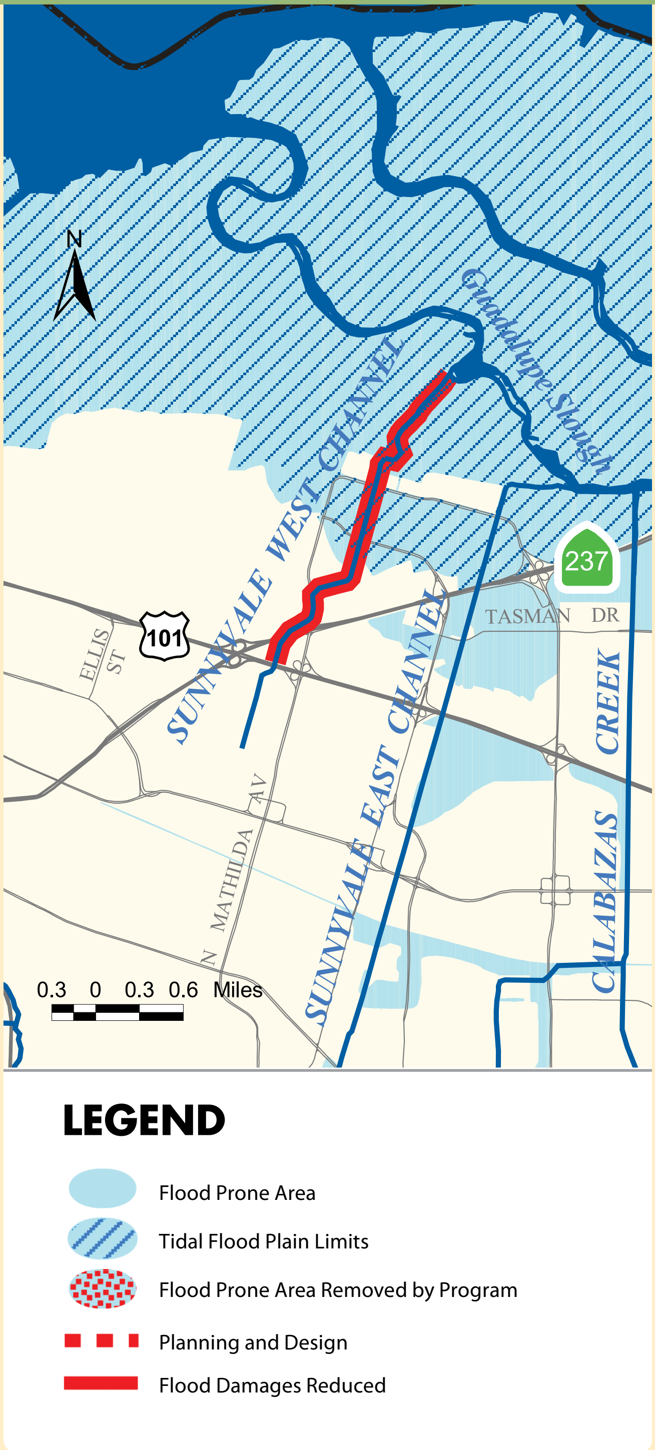
The significant challenge is to complete the construction to replace the existing Caribbean Drive Bridge with a new triple cell box culvert. The Project team has asked the City of Sunnyvale to consider allowing a complete closure of Caribbean Drive to avoid a two year construction window, expensive detours, lane closure, public safety concerns, etc. that are involved with a partial closure. The City of Sunnyvale requested a traffic study be completed to justify a full closure of Caribbean Drive to facilitate construction. The completed traffic study was submitted to the City of Sunnyvale in September 2013 and Project team is awaiting a decision by the City of Sunnyvale.

Current Schedule



Fiscal Year	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Planning & Environmental Review								🟩	🟩	🟩	🟩	🟩					
EIR, Design & Land Purchase											🟨	🟨	🟨	🟨			
Construction															🟪	🟪	

SUNNYVALE EAST CHANNEL



Proposed Project Elements:

- Channel widening and raising of existing earth levees
- Construction of floodwalls upstream of Highway 237
- Erosion protection measures to improve water quality
- Replacement of Caribbean Drive Bridge

Flooding resulting from Sunnyvale East Channel at Caribbean Drive (along bottom edge of photo) and Crossman Avenue on February 3, 1998

Sunnyvale West Channel Flood Protection Project

This project upgrades the circa 1960 Sunnyvale West outfall to protect against a 100-year flood. Besides protecting an important commercial and industrial area in Sunnyvale, the project also reduces erosion, sediment and problems due to subsidence.

In January 2012, the Geotechnical Investigation Report for the project was completed. District staff completed the 30% design on January 31, 2012. Staff is currently working on the preparation of the 60% contract documents with construction scheduled to begin in May 2014 and completed by December 2016.

The Sunnyvale West Channel requires the replacement of the existing Carl Road box culvert with a larger box culvert. The design of the replacement Carl Road box culvert is complete. However, coordination of the construction of the this box culvert remains on-going with the City of Sunnyvale Wastewater Pollution Treatment Plant (WPTP) staff as the existing Carl Road crossing serves as their only access to portions of the WPTP facilities out in the lower San Francisco Bay. In addition, the existing Carl Road box culvert has several gravity feed extraction conduits to their existing adjacent landfills that are required to remain in service 24 hours/seven days a week. Coordination of these efforts is on-going.

($1.86 million expended in FY13 combined for both the Sunnyvale East and West Channels Flood Protection Project)

Objectives and Benefits

- Increase the level of flood protection provided on Sunnyvale West Channel from Guadalupe Slough to Highway 101
- Protect 11 parcels (covering approximately 47 acres) from 100-year riverine flooding

Fifteen-Year Key Performance Indicator (KPI)

Flood damage reduction for eleven parcels by increasing the creek's ability to convey the 100-year storm flow.

How This Activity is Measured

Activity is measured by how many parcels are protected (11 parcels coving approximately 47 acres) from 100-year riverine flooding as a result of the completed Project.

Program Allocation and Project Cost

Total anticipated allocation: $7.5 million ($5.1 million in 1999 dollars escalated at 3% per year)

The actual cost to date — see Sunnyvale East. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13.

Current Performance in FY13 (KPI)

The 60% design submittal and the EIS/EIR Administrative Draft were completed during FY13. The Project has a very aggressive schedule, but remains on schedule.

Planned and Accomplished for FY13

1. Complete 60% design submittal; **Accomplished**
2. Complete Internal Draft Environmental Impact Report; **Accomplished**
3. Complete Hydraulic Analysis; **Accomplished**

4. Complete concrete floodwall designs; **Accomplished**
5. Complete the Carl Road reinforced concrete box (RCB) design; **Accomplished**
6. Complete 90% design submittal; **On Schedule**
7. Coordinate with the various Utility Companies, including PG&E all the relocations needed for the project; **On Schedule**
8. SCVWD Board certifies the Project EIS/EIR in March 2014; **On Schedule**
9. Complete Final Plans and Specifications by March 2014; **On Schedule**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Project planning efforts (Planning Study Report), which considered many different Project alternatives, were completed during the full program. Project moved into the design phase in 2011, where design completion is expected to occur in FY14.

Significant Accomplishments (2001-2013)

- Completed 30% design submittal
- Executed an Environmental Consultant Contract to Prepare Project Environmental Impact Report
- Completed Hydraulic Analysis
- Completed Structural Feasibility Report of existing bridge/culvert crossings to analyze whether the existing structures can support proposed headwalls
- Analyzed Caribbean Bridge Replacement alternatives
- Completed 60% design submittal
- Complete Internal Draft Environmental Impact Report

Challenges to Intended Outcome (2001-2013)

Coordination of the construction of the Carl Road box culvert remains on-going with the City of Sunnyvale Wastewater Pollution Treatment Plant (WPTP) staff as the existing Carl Road crossing serves as their only access to portions of the WPTP facilities out in the lower San Francisco Bay. To find alternative access to the Bay has been difficult. A viable access alternative may be via the Moffett field complex, but security concerns are a significant issue to overcome. In addition, the existing Carl Road box culvert has several gravity feed extraction conduits to their existing adjacent landfills that are required to remain in service 24 hours/seven days a week. Coordination of these efforts is on-going with the City of Sunnyvale and WPTP personnel.

Finally, a development is proposed, Moffett Park Development, within the Project limits which will require significant additional coordination. Discussions continue with the development group to determine if the developer will do the channel improvements along the development or will the District complete the flood protection improvements as part of the Project. Either way, the SCVWD's plans and specifications will need to include the proposed flood protection work as supplemental/optional contract work, in case the developer's project does not occur as scheduled. This increases the amount of coordination needed with writing and organizing the Contract documents with this level of uncertainly that still exists.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is on track to be completed as part of Safe, Clean Water and Natural Flood Protection program. The KPI's will be met within the first five years of the program. KPI's under Safe, Clean Water and Natural Flood Protection program are below.

- KPI: Flood damage reduction for 11 parcels (Sunnyvale West)

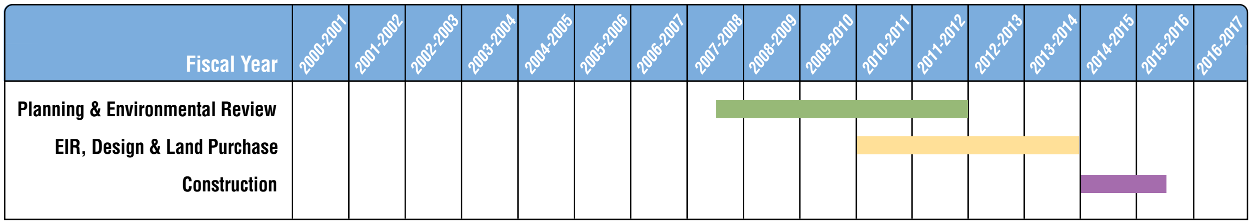
Planned Activities for FY14

- Complete 90% design submittal
- Coordinate with the various Utility Companies, including PG&E on all the relocations needed for the project
- SCVWD Board certifies the Project EIS/EIR in March 2014
- Complete Final Plans and Specifications by March 2014

Opportunities and Challenges

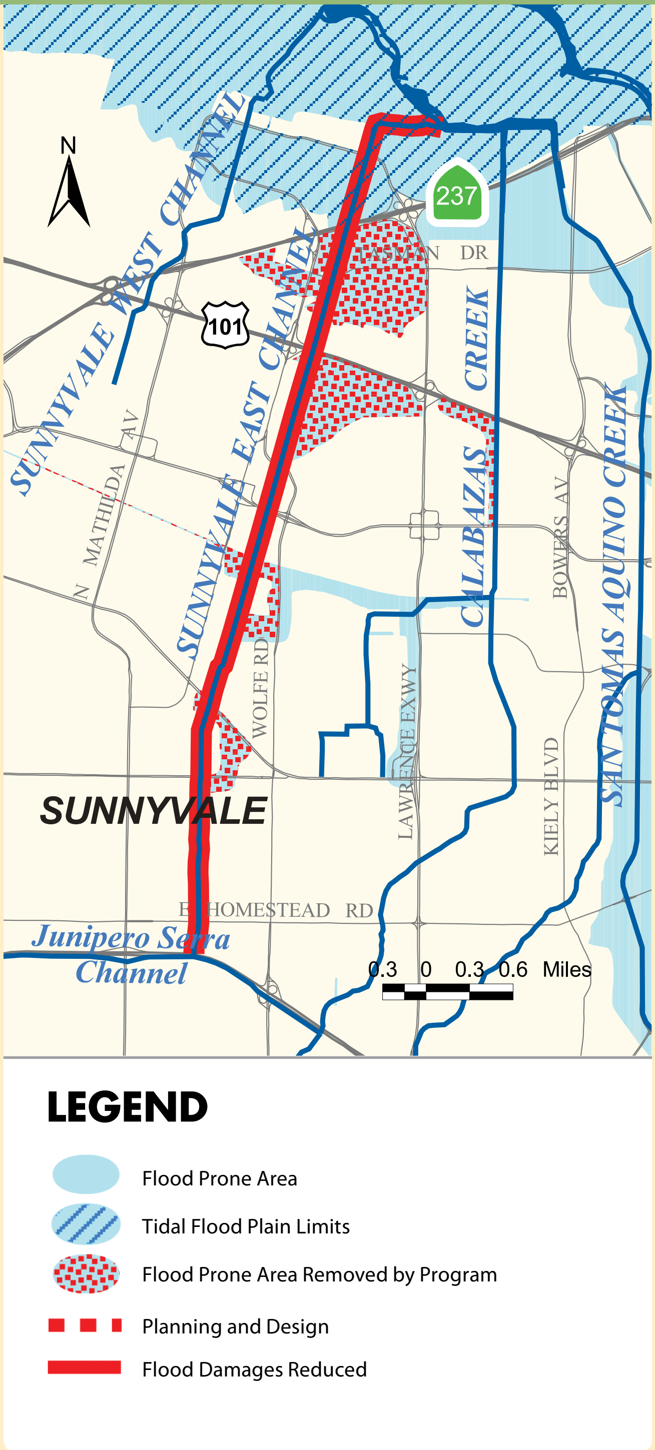
The significant challenge is to coordinate the construction of the Carl Road box culvert with the City of Sunnyvale Wastewater Pollution Treatment Plant (WPTP) staff as the existing Carl Road crossing serves as their only access to portions of the WPTP facilities out in the lower San Francisco Bay region. In addition, the existing Carl Road box culvert has several gravity feed extraction conduits to their existing adjacent landfills that are required to remain in service 24 hours/seven days a week. Finding resolutions to these WPTP challenges are on-going.

Current Schedule



Fiscal Year	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Planning & Environmental Review								🟩	🟩	🟩	🟩	🟩					
EIR, Design & Land Purchase											🟨	🟨	🟨	🟨			
Construction															🟪	🟪	

SUNNYVALE WEST CHANNEL



Proposed Project Elements:

- Construction of floodwalls
- Raising levees with earth fill
- Replace Carl Road Reinforced Concrete Box (RCB) Culvert
- Erosion protection measures to improve water quality

Sunnyvale West Channel looking upstream from Java Drive Bridge crossing.

Calabazas Creek Flood Protection Project

Calabazas Creek extends approximately 13.3 miles from the confluence with Guadalupe Slough to the Saratoga foothills. This project completes flood protection in the Calabazas Creek watershed, which drains approximately 21 square miles within the cities of Sunnyvale, Cupertino, San José, Santa Clara, and Saratoga.

PROJECT COMPLETED

The Project's objective was to provide 1 percent flood protection to 2,483 parcels in the Calabazas Creek watershed between Miller Avenue and Wardell Road. A long detention basin parallel to the creek was built to capture high storm flows, preventing the creek from overtopping its banks in a 100-year flood.

The District also repaired 14 severely eroding banks, using as little "hardscape" as possible. The Project incorporated environmental stewardship principles to reduce erosion with vegetation to enhance habitat for wildlife. The district reduced the cost of the project by collaborating with the City of San José, which rebuilt a BMX park at Calabazas Park.

On November 20, 2012, the District and the cities of Saratoga, San José, and Cupertino received notification from the Federal Emergency Management Agency (FEMA) that the Letter of Map Revision (LOMR) submittal for the Calabazas Creek Flood Protection Project had been approved. The LOMR submittal revises the Flood Insurance Rate Map and FIS Report per our request for the area upstream of Miller Ave. Dates of the effective revisions are April 4 and April 11, 2013 for parcels 209H, 216H, and 217H. The project objectives have been met.

Objectives and Benefits

- Provide flood protection on Calabazas Creek from Miller Avenue to Wardell Road
- Protect 2,483 parcels from 100-year flooding
- Provide erosion protection measures to improve stream quality
- Identify environmental restoration and enhancement and recreational enhancements, where opportunities exist

Fifteen-Year Key Performance Indicator (KPI)

Flood damage reduction for 2,483 parcels that include: 2,270 homes 90 businesses, and 7 schools/institutions.

How This Activity is Measured

Approval of the Letter of Map Revision (LOMR) by FEMA.

Program Allocation and Project Cost

Total anticipated allocation: $51.5 million ($35.1 million in 1999 dollars escalated at 3% per year)

Current estimated project cost: $11 million

STATUS — CURRENT REPORTING PERIOD: FY13.

Current Performance in FY13 (KPI)

The Letter of Map Revision (LOMR) application was approved by FEMA on November 20, 2012. No appeals were received during the 120 days appeal period and therefore FEMA has revised the FIRM and FIS Report per the District request for the area upstream of Miller Ave. Dates of the effective revisions are April 4 and April 11 for panels 209H, 216H, and 217H.

The KPI has been satisfied.

Planned and Accomplished for FY13

1. Submit the Letter of Map Revision (LOMR) application and approval by FEMA: **Accomplished**

   This Project was completed on-schedule and significantly under budget.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Project has been completed.

- The planning study report has been completed
- The design documents for the proposed project have been completed
- The construction of the approved project has been completed
- The LOMR application has been approved by FEMA

Significant Accomplishments (2001-2013)

- Modification/replacement of box culverts at Saratoga-Sunnyvale Road and Union Pacific Railroad (UPRR) crossing
- Bank Erosion repair at 14 locations
- Mitigation Planting
- LOMR application

Challenges to Intended Outcome (2001-2013)

Project has been completed.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity has been completed therefore no further action is needed.

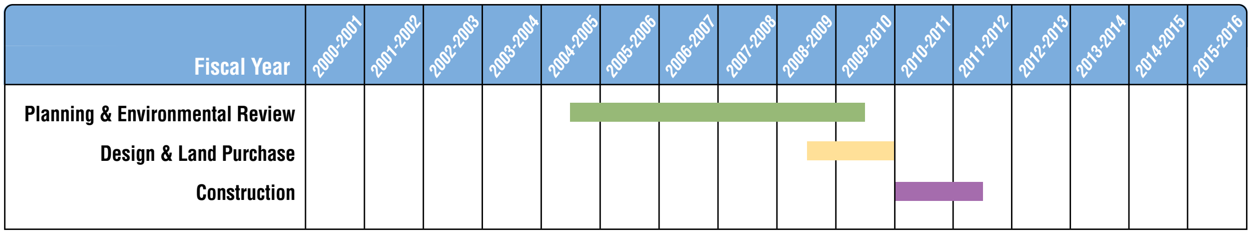
Planned Activities for FY14

None

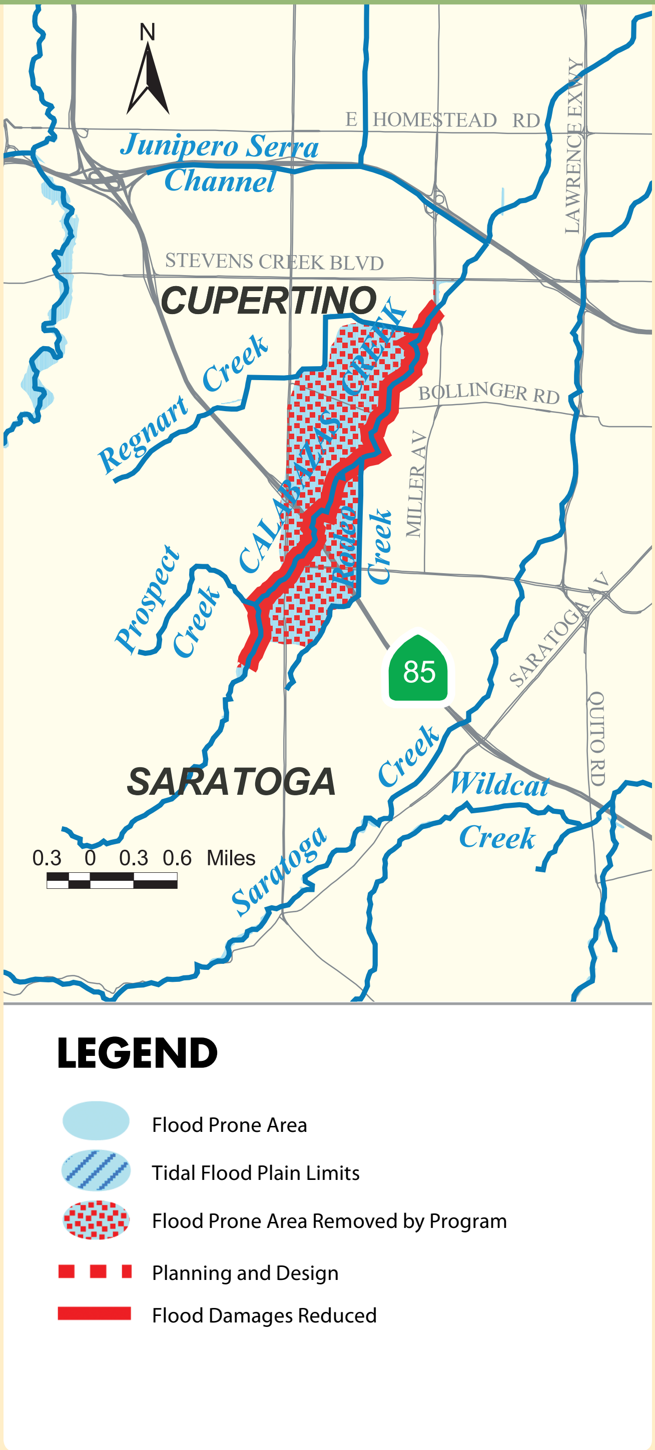
Opportunities and Challenges

Mitigation included planting more than 700 plants of 16 different species of native plants. At this time all success criteria are being met or exceeded. Some of the plants are already established and no longer receiving supplemental irrigation. The greatest maintenance challenge is the very close proximity to neighbors back decks so that some annual mowing will continue to be required for fuel abatement. However, many of the neighbors consider the area their backyard and appreciate the added color, texture, and diversity of the plantings with the increased habitat value.

Current Schedule



CALABAZAS CREEK



Project Elements Implemented:

- Replacement of Bollinger Road Bridge
- Modification/replacement of box culverts at Saratoga-Sunnyvale Road and Union Pacific Railroad (UPRR) crossing
- Bank Erosion repair at 14 locations
- Mitigation Planting
- LOMR application

Box culverts at Saratoga-Sunnyvale Road Looking downstream

Upper Guadalupe River Flood Protection Project

This project provides protection for some of the oldest residential areas in San José, as well as commercial areas in Willow Glen and vital transportation networks.

The Upper Guadalupe River Project is designed to increase flood protection, create recreational opportunities and improve stream habitat. The project provides protection along a 5.7 mile stretch of the river, from Highway 280 to Blossom Hill Road, protecting 7,500 homes from a 100-year flood event. The project is divided into 7 reaches from Reach 6 to Reach 12 for design and construction. This is a joint project with the USACE where federal funding is authorized for design and construction. The District, as the Non-Federal Sponsor, provides funding for acquiring the rights of way and relocating bridges and utilities as needed for the flood protection project.

In October 2007, the District completed the replacement of the Willow Glen Way Bridge with funding from the District and City of San José.

In August 2012, the District completed construction of flood protection improvements and vegetation planting on Reach 6, from Highway 280 to the Union Pacific Railroad crossing. The 4-year plant establishment and maintenance period is scheduled to be completed in April 2016.

In November 2012, the USACE completed construction of flood protection improvements and some vegetation planting of Reach 10B, from Wren Drive to Koch Lane. The lack of federal funding has prevented the USACE from completing the remaining vegetation planting at this time.

The overall project completion has been delayed to December 2021 due to lack of federal funding. In March 2012, the Board directed staff to implement a modified strategy for the project. This modified strategy includes the District completing design and construction of Reach 7 (from downstream of Willow Street to upstream of Alma Avenue) and Reach 12 to meet the intent of the Local Project commitment in the Program. District staff continues working with the USACE staff to amend the Project Cooperation Agreement that will enable the USACE to accept funding contribution ($11M) from the District for design and construction of Reach 12 (from Branham Lane to Blossom Hill Road). The District continues acquiring rights of way necessary and relocating utilities for construction of flood protection improvements along the project.

Objectives and Benefits

- Provide flood protection on Guadalupe River from Highway 101 to Interstate 880 (Reach A) and from Interstate 280 to Blossom Hill Road
- Reduce flooding potential to Highway 87 and the adjacent light-rail line
- Protect 6,989 parcels from 100-year flooding
- Provide long term beneficial impacts to stream ecology, hydrology, wildlife, and fisheries
- Reduce erosion and increase water quality and allow for continuous creek side trail access

Fifteen-Year Key Performance Indicator (KPI)

Using only local funding, a reduced project would complete flood protection improvements in Reaches 6, 7, 10b, and 12, and acquire rights of way and relocate utilities in Reaches 7 to 12. Frequency of flooding would be reduced, however parcels in the floodplain would still be subjected to flooding from upstream sources.

Local and federal funding for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions.

How This Activity is Measured

Number of parcels protected from the 1 percent flood.

Program Allocation and Project Cost

Total anticipated allocation: $136.1 million

Actual cost to date is $74.0 million. (In FY04-FY11 approximately $600,000 of expenditures associated with rental property maintenance were charged to this project. This amount has been deducted from the total expenditure to date reported in FY12 for this project.) The project's benefit-to-cost ratio (BCR) is 1.36. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

In 2013 staff received direction from Board to proceed with the "with local funding only" project by completing flood protection improvements in Reaches 6, 7, 10b, and 12, and acquiring rights of way and relocating utilities in Reaches 7 to 12. Frequency of flooding would be reduced, however parcels in the floodplain would still be subjected to flooding from upstream sources.

- Local and federal funding for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions

Planned and Accomplished for FY13

1. Award Reach 10B (from Wren Drive to Koch Lane) construction contract; **Accomplished**
2. Relocate Water Company water line in Reach 10B; **Accomplished**
3. Complete year two of Reach 6 (from Interstate 280 to UPRR bridge crossing downstream of Willow Street) construction; **Accomplished**
4. Prepare and obtain approval from Santa Clara County Department of Environmental Health for soil remediation of properties at Willow Street and LeLong Street; **Accomplished**
5. Complete Reach 12 (from Branham Lane to Blossom Hill Road) design and begin construction; **Not completed** The Corps did not receive adequate federal funding to complete the design of Reach 12. The Corps needs to amend the existing Project Cooperation Agreement (PCA) before it can receive funding contribution from the District for design and construction of Reach 12. The Corps will need approval from the Office of Management and Budget (OMB), Congressional Budget Committee, and the Corps Headquarters before they can amend the PCA. District staff is working closely with the Corps so that we can execute the PCA amendment as soon as possible to begin construction of Reach 12 by June 2014
6. Continue acquiring rights-of-way for the project; **On Schedule**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

- In 2013 staff received direction from Board to proceed with the "with local funding only" project by completing flood protection improvements in Reaches 6, 7, 10b, and 12, and acquiring rights of way and relocating utilities in Reaches 7 to 12. Frequency of flooding would be reduced, however parcels in the floodplain would still be subjected to flooding from upstream sources
- Local and federal funding for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions

Significant Accomplishments (2001-2013)

- Willow Glen Way Bridge replacement, October 2007
- Reach 10B construction of improvements, November 2012
- Reach 6 construction of improvements, August 2012
- Modified Project Strategy initiation, March 2012

Challenges to Intended Outcome (2001-2013)

The project has a BCR of 1.36; the Corps has indicated that a BCR of less than 2.5 may not be considered a priority for federal funding. District staff continues to work with the Corps to address OMB concerns to support federal funding of project with a BCR of less than 2.5.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity will be carried forward as project E8 of Safe, Clean Water and Natural Flood Protection program and will meet the original Clean, Safe Creeks KPIs.

1. **With federal and local funding**, construct a flood protection project to provide 1 percent flood protection to 6,280 homes, 320 businesses and 10 schools and institutions
2. **With local funding only**, construct flood protection improvements along 4,100 feet of Guadalupe River between Southern Pacific Railroad (SPRR) crossing, downstream of Willow Street, to UPRR crossing, downstream of Padres Drive. Flood damage will be reduced; however, protection from the 1 percent flood is not provided until completion of the entire Upper Guadalupe River Project

Planned Activities for FY14

- Execute PCA amendment in January 2014
- Complete Reach 12 design and construction contract documents in February 2014
- Award Reach 12 construction contract in April 2014
- Begin Reach 12 construction in June 2014
- Continue acquiring right-of-ways for Reaches 7 to 11

Opportunities and Challenges

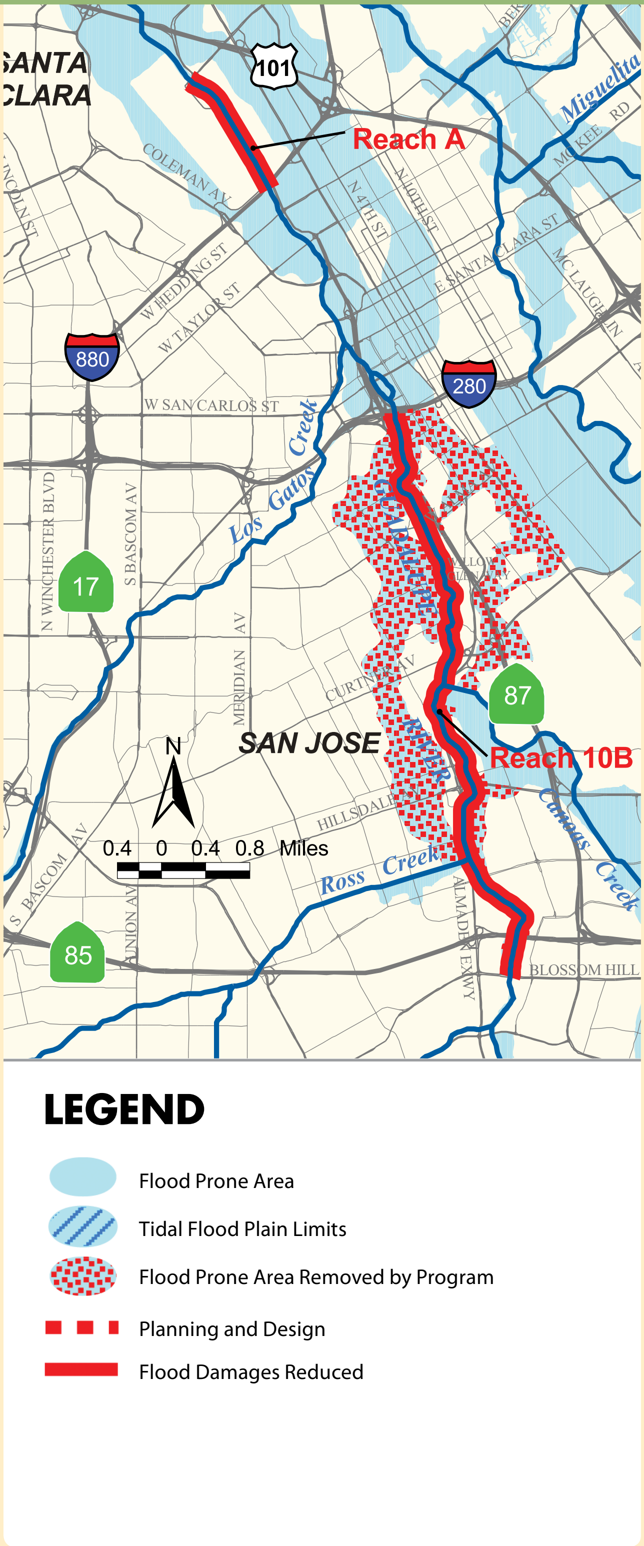
The USACE has not received adequate federal funding for design and construction of Reach 12. The USACE needs to amend the existing PCA in a timely manner before it can receive funding contribution from District for design and construction of Reach 12. District staff with the USACE staff is working to ensure the project is policy compliant with a high benefit to cost ratio.

Current Schedule

Fiscal Year	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2021
Planning & Environmental Review		🟩	🟩															
EIR, Design & Land Purchase		🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	🟨	
Construction			🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪	🟪

Note that the last time block includes a four-year time span of 2017-2021

UPPER GUADALUPE RIVER



Project Elements to be Implemented:

- Repair of erosion sites along Reach 10B (from Wren Drive to Koch Lane) that were caused by heavy storms in October 2009 and January 2010.
- Replace Curtner Avenue Bridge.
- Design and construct new bridge or bridge extension at: Willow Street, West Virginia Street, Alma Street, and the UPRR Crossing.
- Create additional 8,500 linear feet of vegetated shading canopy and 5½ acres of riparian forest.
- Construct flood protection improvements along approximately 5.7 miles of Guadalupe River from Hwy 280 to Blossom Hill Road (i.e., Reaches 6 to 12, Canoas Creek, and Ross Creek)
- Allow for six miles of future park and trail development that will connect Almaden Valley to downtown San José.

Project Elements Completed:

- Willow Glen Way Bridge replacement (Oct. 2007)
- Removal of eight (8) fish barriers to provide fish access to 19 miles of stream habitat (Oct. 2008)
- Reach 10B improvements (January 2010)
- Reach 10B repairs (November 2012)
- Reach 6 plant installation (April 2012)
- Reach 6 improvements (August 2012)

Flooding from Guadalupe River under Highway 87 at Alma Avenue in January 1995.

Berryessa Creek Flood Protection Project

Berryessa Creek is a major tributary of Coyote Creek. It drains a large portion of Milpitas and areas of East San José.

The project (Upper Berryessa Creek) is on schedule to be completed by December 2016. Since adequate federal funding was not received to date, the District is currently moving forward with the "Local Only" option, i.e. a reduced project extending from the confluence of Lower Penitencia Creek to Montague Expressway. Recent development in the project area, i.e. the BART 10-mile extension project from Warm Springs Station in Fremont to the North San José Berryessa area is scheduled to be completed and in startup/testing operation in 2016 and begin running in 2018. The new BART system has an underground station, Milpitas Station, located in the Berryessa Creek floodplain. The Berryessa Creek project's completion is critical to the BART extension's planned operations. Therefore, the District made the decision to hire Tetra Tech to perform design from Calaveras Blvd to Montague Expressway (Phase 1) with local dollars. Should federal dollars not be forthcoming in FY14, the District will also move forward with construction. Should federal dollars come in later, we have preserved the option to build the full project.

Objectives and Benefits

- Provide flood protection on Berryessa Creek from Calaveras Boulevard to 200 feet upstream of Old Piedmont Road
- Protect more than 30 miles of streets including Calaveras Boulevard and Montague Expressway
- Protect 1,814 parcels from 100-year flooding, as described in the original Program
- Use setback levees and floodwalls and incorporate geomorphic channel designs where feasible to protect sensitive areas, minimize impacts to riparian and fisheries habitat, and provide a more sustainable creek corridor
- Provide revegetation mitigation to protect the riparian and wetland environment
- Implement sediment control measures to improve water quality and reduce maintenance
- Accommodate the cities' trail master plans that provide stream-side access along the creek

Fifteen-Year Key Performance Indicator (KPI)

Using only local funds, a reduced project would extend from the confluence with Lower Penitencia upstream to Montague Expressway, modifying 3 miles of channel and protecting approximately 100 parcels.

Local and federal funding for flood damage reduction for 1,814 parcels including 1,420 homes, 170 businesses, and 5 schools/institutions.

How This Activity is Measured

Numbers of parcels protected from a 1 percent flooding.

Program Allocation and Project Cost

Total anticipated allocation: $27.9 million ($19.0 million in 1999 dollars escalated at 3% per year)

The actual cost to date is $7.8 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

On schedule to meet CSC goals of KPI by FY2016.

Planned and Accomplished for FY13

1. Perform alternatives economic analysis
   Accomplished: Results from the analysis was included in the National Economic Development plan identification
2. Identify National Economic Development (NED) Plan
   Accomplished: The NED plan was identified. It constitutes a lower level of protection and would not meet FEMA freeboard standards for removing parcels from the regulatory floodplain. The District's preferred plan would remove parcels from the regulatory floodplain
3. Prepare draft General Re-evaluation Report (GRR) and EIS
   Accomplished: The draft GRR/EIS was circulated for public review and comments
4. Develop multi-party agreement with the Santa Clara Valley Transportation Authority (VTA) and County of Santa Clara on BART station project for cost-sharing with VTA on Montague Expressway culvert as part of their Montague Expressway widening project
   Accomplished: Agreement was executed

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Project planning and Environmental Review will be completed in FY14. Design and Land Purchase targeted for completion in FY14. Subsequent construction to begin in FY15 with completion in FY17.

Significant Accomplishments (2001-2013)

- Executed Feasibility Cost-Sharing Agreement with the Corps
- Held multiple community meetings to receive public input on the project
- Performed feasibility planning study, including survey and hydraulic analysis
- Evaluated different alternatives solutions
- Performed alternative economic analysis and identified NED plan
- Prepared draft GRR/EIS
- Executed cost-sharing agreement with VTA and County of Santa Clara to construct Montague Expressway culvert
- Retained Tetra Tech to perform design of Phase I to ensure project remains on schedule

Challenges to Intended Outcome (2001-2013)

This project has Benefit to Cost Ratio of 8.9 to 1. However, despite this favorable ratio, the funding from the federal government remains to be a challenge.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is on track to be completed as part of Safe, Clean Water and Natural Flood Protection program. The KPI's will be met within the first five years of the program.

- KPI: Flood damage reduction for 100 to 1,814 parcels (depending on the federal funding)

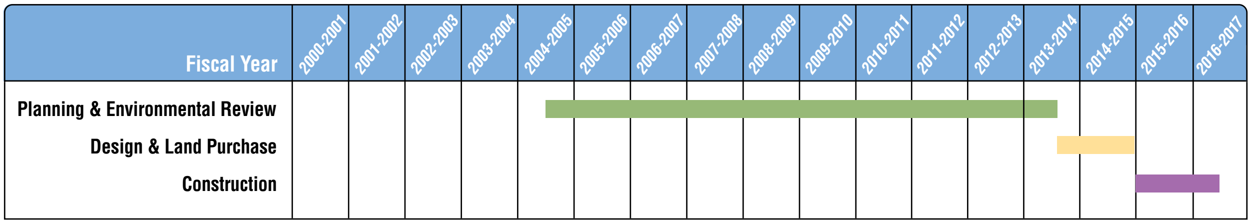
Planned Activities for FY14

- Complete Final GRR/EIS by October 2013
- Execute Design Agreement with AC by Jan 2013
- Execute single source agreement with Tetra Tech by November 2013
- Start design activities by December 2013

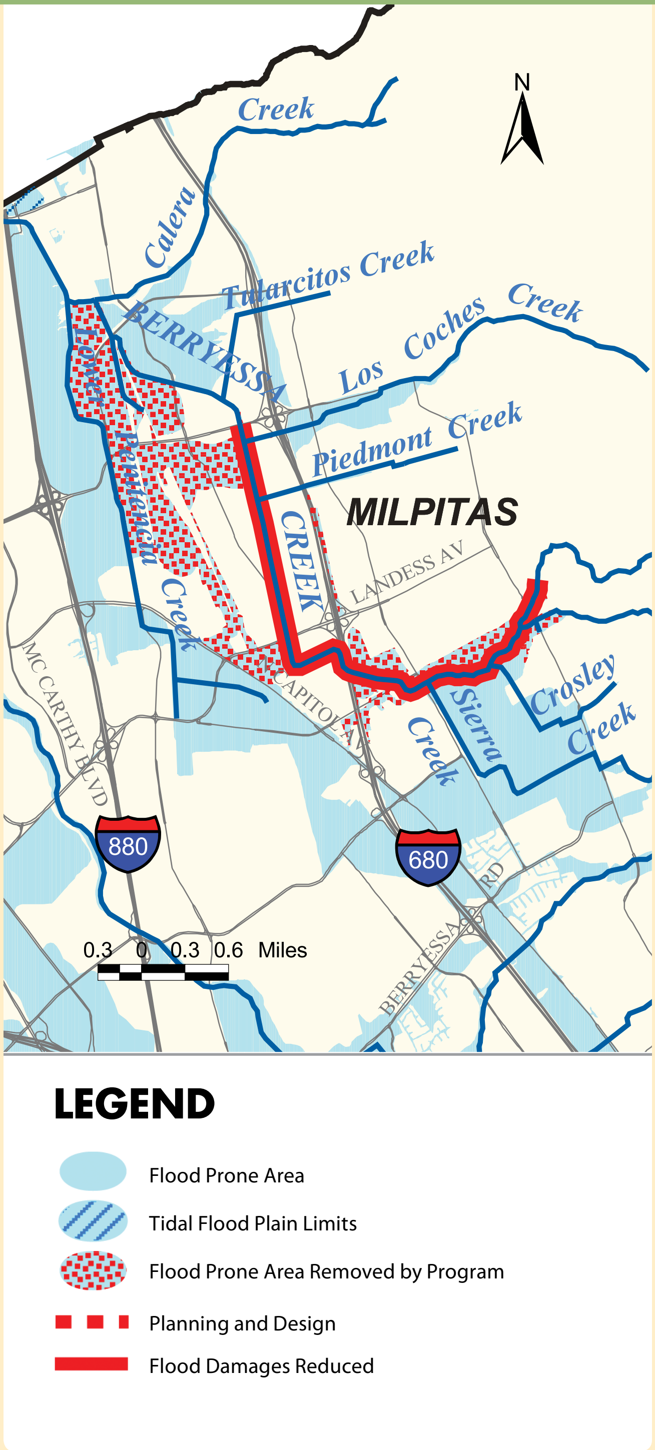
Opportunities and Challenges

The challenge for this project continues to be federal funding for the project. Another challenge will be to complete design and construction by December 2016.

Current Schedule



BERRYESSA CREEK



Potential Project Elements:

- Channel excavation and widening, including levees/floodwalls between Calaveras Boulevard and Interstate 680.
- Bridge/culvert modifications for Yosemite Drive and Ames Avenue, and replacements for other crossings/intersections, including Calaveras Boulevard and Montague Expressway.
- Recreational features between Calaveras Boulevard and Interstate 680.

Business flood damage from Berryessa Creek flooding.

Coyote Creek Flood Protection Project

(Planning, design, and partial construction only)

The Coyote Creek watershed is the largest in Santa Clara County, draining Milpitas and portions of San José and Morgan Hill. This project provides planning, design and partial construction to protect residential, commercial and business districts in central and north San José.

Based on input received from the community on the conceptual alternatives for flood protection along Coyote Creek, the project team has evaluated the options of modifying reservoirs and creating new off-stream detention basins in the upper watershed to minimize channel improvements in the project reaches in Coyote Creek. The results show that each of the options considered would cost more than $500 million. Due to the limited funding from the Program, staff has concentrated its effort on the downstream reaches work from Montague Expressway to Interstate 880 that can be supported within the Program budget. A Planning Study Report was adopted by the Board on June 26, 2012, and staff is currently in the process of negotiating a contract with a design firm to prepare construction documents for the reaches between Montague Expressway and Interstate 880. Staff is also in the process of hiring an environmental firm to prepare the CEQA document for the project. Staff is continuing coordination with the City of San José and other stakeholder groups on the project. ($445,000 expended in FY13)

Objectives and Benefits

- Provide planning, design, and partial construction of flood protection measures on Coyote Creek, from Montague Expressway to Interstate 280. The length of project that will be constructed is dependent on available funds
- Identify environmental restoration and enhancement benefits where opportunities exist
- Identify recreation enhancements where opportunities exist
- Incorporate re-vegetation and aesthetic elements similar to the Coyote Creek park chain near Williams Street in San José

Fifteen-Year Key Performance Indicator (KPI)

Planning study, design, and partial construction (to the extent allowed by available funding) of an engineering plan to provide flood damage reduction.

How This Activity is Measured

Complete construction of the reaches from Montague Expressway to I-880.

Program Allocation and Project Cost

Total anticipated allocation: $47.0 million ($32 million in 1999 dollars escalated at 3% per year).

The actual cost to date is $10.1 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

On schedule to meet CSC goals of KPI by FY2016.

Planned and Accomplished for FY13

1. Perform feasible alternatives analysis; **Accomplished**
2. Identify staff-recommended alternative; **Accomplished**
3. Prepare Planning Study Report (PSR) and acquire Board's approval; **Accomplished**
4. Perform creek surveys downstream of Montague Expressway; **Accomplished**
5. Perform fishery sampling field work; **Accomplished**
6. Initiate consultant hiring process; **Accomplished**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Project planning was completed in FY13. Design, Environmental Assessment and Land Purchase targeted for completion in FY15. Subsequent construction to begin in FY15 with completion in FY16.

Significant Accomplishments (2001-2013)

- Performed geomorphic and floodplain analysis
- Completed 5-year fish monitoring study
- Held multiple community meetings to receive input
- Completed conceptual alternatives analysis
- Prepared PSR
- Acquired and relocated a few properties in the floodplain

Challenges to Intended Outcome (2001-2013)

Staff anticipates challenges in getting permits from regulatory agencies since this is a Steelhead stream.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is on track to be completed as part of Safe, Clean Water and Natural Flood Protection program. The KPI's will be met within the first five years of the program.

- KPI: Planning study, design and partial construction of an engineering plan to provide flood damage reduction

Planned Activities for FY14

- Complete CEQA document
- Advertise for construction of Montague Expressway to I-880
- Start construction

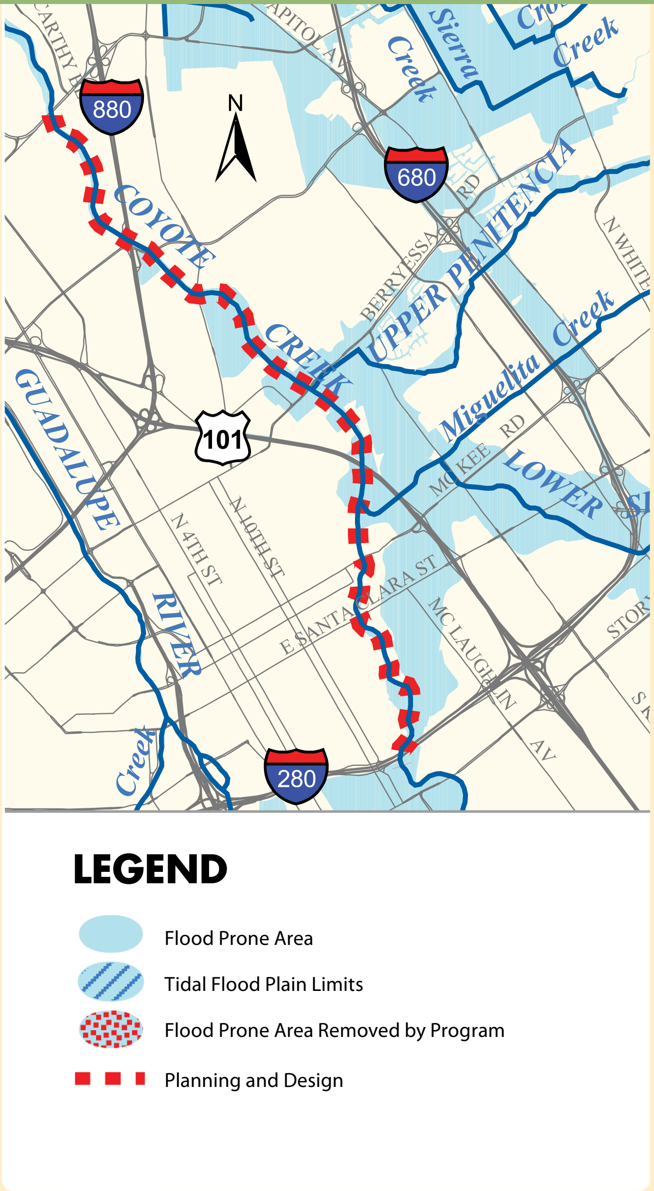
Opportunities and Challenges

Since Coyote Creek has been identified as a steelhead habitat stream, staff anticipates challenges in securing permits from regulatory agencies for this project.

Current Schedule

Fiscal Year	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Planning & Environmental Review				🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩			
Design & Land Purchase														🟨	🟨		
Construction																🟪	🟪

COYOTE CREEK



Project Alternatives to be Evaluated Include:

- Channel widening
- Floodwalls and levees
- Bridge replacement
- Channel restoration and revegetation

Existing Charcot Road Bridge over Coyote Creek, undersized to pass the 1% flood, as determined by Coyote Creek Flood Protection Project.

Upper Llagas Creek Flood Protection Project

The Llagas Creek watershed covers 104 square miles in Gilroy, San Martin and Morgan Hill, and includes commercial and agricultural developments, as well as rapidly expanding residential areas. The Upper Llagas Creek flood protection project protects the urban area of Morgan Hill from the 1 percent flood and reduces the frequency of flooding in other areas.

Phase 1: Reach 4, Reach 7a and Lake Silveira offsite mitigation site: The design and Phase 1 construction of Reach 4 (Buena Vista Avenue to East Little Llagas confluence near Lena Avenue), Reach 7a (Main Branch Llagas Creek near Monterey Road to La Crosse Drive), and the Lake Silveira offsite mitigation element of the Upper Llagas Creek remain on schedule with construction to begin in 2014.

Phase 2: Remaining Project Reaches: The concurrent design and Phase 2 Construction of Reach 5 (East Little Llagas confluence to 700 feet upstream of Highway 101), Reach 6 (700 feet upstream of Highway 101 to West Little Llagas Creek), Reach 7b (La Crosse Drive to West Dunne Avenue), Reach 8 (West Dunne Avenue to 200 feet upstream of Llagas Road), and Reach 14 (Main Branch Llagas Creek to 2400 feet upstream of San Martin Avenue) remains on schedule. Phase 2 construction will need an additional estimated $46M from State subventions, federal, Safe Clean Water, and/or other available funding sources in order to complete construction. Upon completion of Phase 2, the Project will provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.

The following required project elements/studies were completed in FY13:

- 30% Design Submittal
- 65% Design Submittal
- Various Biological surveys
- Completion of an internal first Draft of the Environment Impact Statement/Environment Impact Report (EIS/EIR)

The District's consultant is scheduled to submit the 90% Design Submittal, including Construction Documents, Design Documentation Report, and an updated project Cost Estimate in November 2013.

The project's benefit to cost ratio (BCR) is 0.23. ($5.02 million expended in FY13)

Objectives and Benefits

- Provide flood protection between Buena Vista Road and Llagas Road
- Protect 1,397 parcels from 100-year flooding
- Provide a more aesthetically pleasing and environmentally sound project than the concrete channel originally outlined in the 1982 Engineer's Report
- Provide additional wetland area and riparian habitat, and support steelhead migration within the lower reaches
- Implement erosion reduction measures to improve water quality
- Provide potential for other entities to develop recreational areas including trails, sports fields, and parks in the upper reaches

Fifteen-Year Key Performance Indicator (KPI)

Local funding only would include 3.25 miles of channel construction (Phase 1), including a 1-mile diversion. This would provide protection from a 10-year flood event for some agricultural land, leaving areas of Morgan Hill exposed to flooding.

Local and federal funding for flood damage reduction combined would include: 1,397 parcels comprised of 820 homes, 200 businesses, 190 agricultural parcels, and 6 schools/institutions.

How This Activity is Measured

1. Amount of funding received from federal and other sources
2. Completion of Phase 1 Construction

Program Allocation and Project Cost

Total anticipated allocation: $29.2 million ($12.7M from Clean Safe Creeks in 1999 dollars escalated at 3% per year + $10.5M from State Subventions). The project's benefit to cost ratio (BCR) is 0.23.

The actual cost to date is $21.2 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

Significant progress was made on the Project design efforts during FY13. Both the 30% Design Submittal (July 2012) and the 65% design submittal (April 2013) were completed. Significant progress was made towards the completion of the Administrative Draft EIS/EIR (August 2013) for the Project. Efforts on both fronts continue on schedule despite an aggressive schedule.

Planned and Accomplished for FY13

1. Complete various additional Biological surveys; **Accomplished**
2. Complete the 30% design submittal by July 2012; **Accomplished**
3. Complete the 65% design submittal by March 2013; **Accomplished**
4. Complete the 90% design submittal by November 2013; **On Schedule**
5. Complete the Final Design Documents by February 2014; **On Schedule**
6. Complete the Final EIS/EIR by April 2014; **On Schedule**
7. Complete the acquisition of Phase 1 right-of-way (approx. 35 parcels) by May 2014; **On Schedule**
8. Continue coordination with the Corps on the Project design despite limited funding for Corps staff; **On Schedule**

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Between FY2001-FY2013, only a total of $3.015M in federal funding was authorized for the Project. No funding occurred from FY 11-13, and very little funding was authorized in prior years. Consequently, the District Board of Directors and the City of Morgan Hill decided to proceed with the Project using only local funding in 2009, while still working with the U.S. Corps of Engineers to secure federal funding. In 2009, the City of Morgan Hill agreed to contribute up to $3 million towards the project design.

Project design efforts continue on schedule. Preparation of the EIS/EIR continues concurrently with design efforts. Both efforts are expected to be completed by the end of FY14.

Significant Accomplishments (2001-2013)

- Executed an agreement to prepare the project's Environmental Impact Report/Statement (EIR/S)
- Completed the project survey work as required for design
- Completed the Comprehensive Evaluation of Project Datums (CEPD) Report
- Completed the Geotechnical Investigation
- Completed the Geomorphology Study
- Complete the Noise Baseline, Cultural Resources, Wetland Delineation, Site Investigation, Least Bell's Vireo Assessment, and Lake Silveira surveys
- Completed the 30% design submittal by July 2012
- Project received $49K reprogrammed federal funding in FY13

Challenges to Intended Outcome (2001-2013)

The project's benefit to cost ratio (BCR) is 0.23. To be considered for federal funding, a project must have a BCR of 2.5 or greater. In March 2013, Corps staff informed SCVWD staff that it is very unlikely for the Upper Llagas Creek Project will ever receive future federal funding due to the Project's low BCR.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This activity is being carried forward as part of the Safe, Clean Water and Natural Flood Protection program. The Safe, Clean Water and Natural Flood Protection program allocated $39.1 million in additional funding for the Project. The original Clean, Safe Creek KPI's will be met. KPI's are reflected below.

1. **With federal and local funding**, provide flood protection to 1,100 homes, 500 businesses, and 1,300 agricultural acres, while improving stream habitat.
2. **With local funding only**, provide 100-year flood protection for Reach 7 only (up to W. Dunne Avenue in Morgan Hill). A limited number of homes and businesses will be protected.

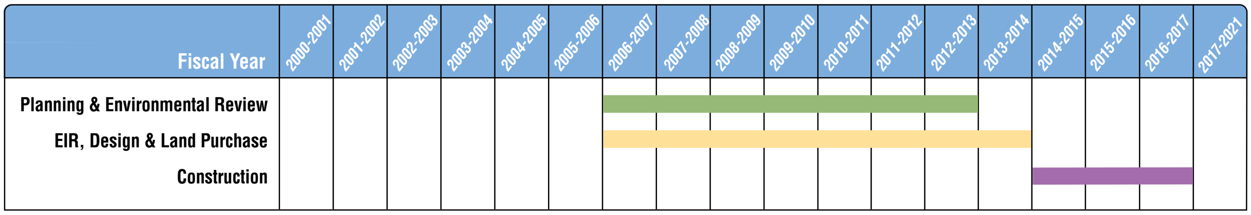
Planned Activities for FY14

- Hire a Real Estate Consultant to assist SCVWD staff in acquiring an estimated 146 parcels required for the Project
- Complete the 90% design submittal by November 2013
- Complete the Final Design Documents by February 2014
- Complete the Final EIS/EIR by April 2014
- Complete the acquisition of Phase 1 right-of-way (approx. 35 parcels) by May 2014
- Continue with the acquisition of Phase 2 right-of-way (approx. 111 parcels) by May 2015

Opportunities and Challenges

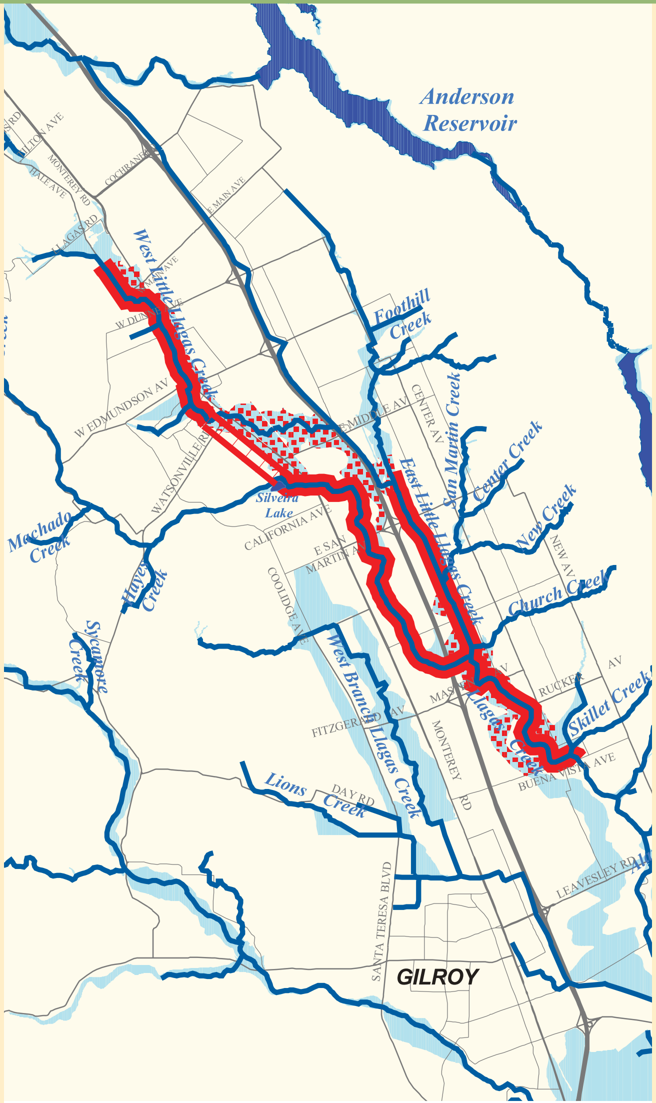
The significant challenge faced by the Upper Llagas Creek Project is the lack of Federal funding. For this Project to be completed, with an estimated cost currently at $134 million, using only local funding is a difficult challenge without federal assistance.

Current Schedule



Fiscal Year	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2021
Planning & Environmental Review							■	■	■	■	■	■	■					
EIR, Design & Land Purchase							■	■	■	■	■	■	■	■				
Construction															■	■	■	

UPPER LLAGAS CREEK



LEGEND

- 🟦 Flood Prone Area
- ▨ Tidal Flood Plain Limits
- ▩ Flood Prone Area Removed by Program
- ■ ■ ■ Planning and Design
- ▬ Flood Damages Reduced

Project Elements to be Implemented:

- Channel widening and culvert improvements
- Diversion (bypass) channel to relieve flooding
- Historic creek restoration

March 24, 2011 West Little Llagas Creek flooding in the City of Morgan Hill at the intersection of Llagas Road and Shadowbrook Way

Outcome 1: Flood Protection Projects (Identified Features that Support Outcomes 2, 3, and 4)

				Outcome 2	Outcome 3	Outcome 4
Watershed	**Project Name**	**Project Description**	**Project Stage**	**Water Quality Improvement**	**Healthy Creek and Bay Ecosystems**	**Opportunities for Trails and Open Space**
Lower Peninsula/ West Valley	Permanente Creek	Flood protection project from SF Bay to El Camino Real. May include off-stream storage, channel widening, replacement/upgrade of box culverts, and potential trail opportunities.	Planning/Design		Provide red-legged frog habitat	
Lower Peninsula/ West Valley	San Francisquito Creek	Flood protection project (planning and design) from SF Bay to Searsville Dam. Includes feasibility study, engineer's report, and EIR/EIS.	Planning/Design		Possible flood bench for pickleweed–salt marsh harvest mouse & clapper rail habitat	
Lower Peninsula/ West Valley	Sunnyvale West Channel	Flood protection project from SF Bay to Almanor Avenue. Project will include construction of flood walls, raising levees, and building new culverts.	Design/ Construction	Bank erosion protection		Provide trail opportunities
Lower Peninsula/ West Valley	Calabazas Creek	Flood protection project from Miller Avenue to Wardell Road. Includes replacement of bridges/ culverts and extensive bank erosion repair, and may identify potential enhancement and trail opportunities.	Completed Construction	Bank erosion protection	Potential red-legged frog habitat in "basin" area	
Lower Peninsula/ West Valley	Sunnyvale East Channel	Flood protection project from SF Bay to Inverness Way. Projet includes channel widening, raising of levees, erosion protection measures and bridge/culvert replacement.	Design/ Construction	Bank erosion protection		Provide trail opportunities
Guadalupe	Upper Guadalupe River	Flood protection project from I-280 to Blossom Hill Rd. Includes geomorphic floodplain design, channel widening, bridge replacement, removal of nine fish barriers, enhancing 8,500 lineal feet of vegetated shading canopy, and trail opportunities.	Design/ Construction	Reduce bank erosion by implementing geomorphic design features	Preserve and enhance existing vegetation, fisheries and wildlife habitat; remove 9 fish migration barriers, revegetate approx. 20 acres.	Approx. 5.7 miles of trail opportunities
Coyote/ Uvas-Llagas	Berryessa Creek	Flood protection project from Calaveras Blvd to I-680. include new box culvert barrels, floodwalls and levees, revegetated areas, and trail opportunities.	Planning	Bank erosion protection	Provide riparian vegetation habitat and floodplains	Approx. 2 miles of trail opportunities
Coyote/ Uvas-Llagas	Coyote Creek	Flood protection project from 6 miles upstream of Montague Expressway to I-280 (planning, design, partial construction). May include upstream and off-stream storage, channel widening improvements, bridge replacement, and potential enhancement and trail opportunities.	Design	Bank erosion protection	Remove overgrown and non-native vegetation	Approx. 1 mile of trail opportunities to be completed by 2016 from Montegue Expwy to I-880
Coyote/ Uvas-Llagas	Upper Llagas Creek	Flood protection project from Buena Vista Ave to Wright Ave (includes West Little Llagas Creek). Includes widening creek channel, culvert improvements, bypass channel, historic creek restoration, and potential trail opportunities.	Planning/Design	Reduce bank erosion by implementing geopmorphic design features	Provide riparian vegetation and wildlife habitat, off-site wetlands, remove/replace evasive non-natives with native vegetation	Potential trail opportunities

Activity 1.2

Sediment removal to preserve flood protection capacity of creeks.

The goal of the sediment removal and maintenance of newly improved creeks is to maintain at least 90% of improved channels at design capacity. The Program pays for the removal of 10% of the total cubic yards removed. The average annual total sediment removal was projected to be approximately 80,000 cubic yards, or programmatically 8,000 cubic yards. This year 3,864 cubic yards were removed with program funds. To date, the Program has funded removal of 66,098 cubic yards.

Over the past few years, Santa Clara County has experienced less intense storms, therefore, less sediment has deposited in streams that needs removal. The objective of sediment removal is to maintain a stream's designed water carrying capacity. This capacity has been maintained, although the amount of sediment removal was less than the annual estimation of the program or 8,000 cubic yards.

Removal challenges included the following: access and staging areas for equipment; nesting birds or other environmental restrictions; staff; weather; equipment availability; contaminated sediment and permit restrictions.

Fifteen-Year Key Performance Indicator (KPI)

Remove approximately 120,000 cubic yards of sediment from all creeks.

How This Activity is Measured

Cubic yards of sediment removed from District creeks.
(10% of sediment removal is funded by the Program).

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

In FY13, the CSC program was responsible for the removal of 3,864 cubic yards, 10% of the sediment total 38,640 cubic yards removed from creeks countywide.

This sediment removal work restored 3.2 miles of creek channel capacity.

Planned and Accomplished for FY13

The District CSC had targeted 3,624 cubic yards for removal from 15 sites, and submitted this figure to the regulatory agencies.

The activities accomplished this year 3,864 cubic yards from 11 sites was more material than we had planned per our submittal and an increase from last year's 3,246 cubic yards. However the amount did fall short of the annual activity goal of 8,000 cubic yards. Every year, plans for extra sites are included in the proposed work summary as submitted, this is to allow for flexibility in site selection in the face of common and unpredictable occurrences such as nesting birds, frogs or other environmental factors that delay or hamper in stream work. This year there were several sites with issues that would not allow work to begin. The additional approved sites allowed the District to work on other projects on the approved list. Furthermore, sediment quantities are estimated very early in the year in February and March for submittal to the regulators by May 1. Final calculations are completed later and depending on storm events more or less sediment can accumulate before the start of work.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

During the first 12 years of the 15-year program, the project has not met the targeted amount of sediment removal. The average annual CSC goal (ten percent of the total amount of sediment removed) is 8,000 cubic yards from all channels. The District's CSC program has removed 66,098 cubic yards program-to-date versus a program-to-date target of 96,000 cubic yards.

Significant Accomplishments (2001-2013)

With the initial launch of the CSC program a significant amount of sediment was removed (14,700 cubic yards) in 2001-2002, due to the accumulation of deferred work.

The amount of sediment in a stream is dependent upon the amount and intensity of rainfall. Over the past few years, Santa Clara County has experienced less intense storms, therefore, less sediment has deposited in streams that needs removal. The objective of sediment removal is to maintain a stream's designed water carrying capacity. This capacity has been maintained, although the amount of sediment removal was less than the annual estimation of the program or 8,000 cubic yards. The cost of removing sediment from channels depends on many factors including: location of removal sites and complexity of the environmental settings (e.g., tidally influenced sites versus sites in channels that are in urban or upland settings, etc.); regulatory requirements and Best Management Practices associated with the removal activities and their potential impacts on the environment; ease of access to removal sites and constraints on staging and mobilizing equipment; complexity and duration of dewatering operations necessary to allow the removal activities; proximity to sediment disposal sites and availability of sediment reuse options; soil profiling and characterization requirements for disposal or reuse purposes; and the amount of vegetation and other characteristics of the removed sediment requiring special handling and disposal provisions.

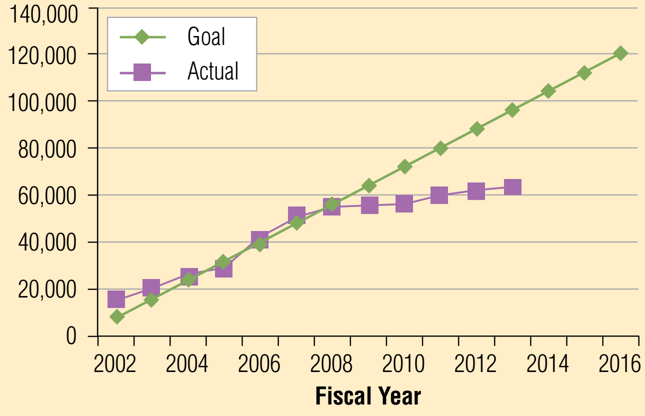
Table 1.2.1 | Annual Performance

Sediment Removal

Fiscal Year	Annual**	
	Planned	Actual
2001 – 2002	8,000	14,700
2002 – 2003	8,000	5,700
2003 – 2004	8,000	4,600
2004 – 2005	8,000	3,700
2005 – 2006	8,000	13,000***
2006 – 2007	8,000	9,200
2007 – 2008	8,000	3,400
2008 – 2009	8,000	738
2009 – 2010	8,000	1,741
2010 – 2011	8,000	2,209
2011 – 2012	8,000	3,246
2012 – 2013	8,000	3,864
Total	**96,000**	**66,098**

Graph 1.2.1 | 15 Year Program Graph

Cubic Yards of Sediment Removed*
Program-to-Date
*Portion funded by the Program



***The number represents 10% of the total cubic yards removed, 10% of the project is funded by the Clean, Safe Creeks and Natural Flood Protection Program.*
****FY 2005-06 shows accelerated funding of 32%*

Challenges to Intended Outcome

Challenges to this activity are factors outside of District control. Examples are increases in dump fees, availability of places to dispose of the sediment, and permits required from regulatory agencies. It may not be necessary to remove 120,000 cubic yards of sediment by FY16 depending on how well the District achieves other sediment source reduction and flood protection activities. This should be a consideration when reviewing the key performance indicator (KPI) for this activity.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with project E1 or Vegetation Control and Sediment Removal for Flood Protection, which has a similar or expanded KPI. The relevant KPI for project E1 is to:

- Maintain 90 percent of improved channels at design capacity

Planned Activities for FY14

The CSC program is targeting the removal of 3,080 cubic yards from five sites.

Opportunities and Challenges

FY14 sediment removal quantities may be lower than estimated due to regulatory permits. Several sediment removal projects proved to be challenging. For example, the 49er construction project adjacent to our sediment project at San Tomas Creek upstream Tasman, entailed complex coordination with the major development agency responsible for 49er stadium project. In addition, the creek conditions on Lower Silver Creek make removing sediment a challenge since high groundwater conditions continuously add water to the dredging operations work area. This additional water requires a higher level of monitoring and the use of more intensive and costly, water diversion techniques.

Financial information is provided in Appendix A

Sediment removal — Guadalupe Watershed — Guadalupe River (upstream) Coleman

Activity 1.3

Maintenance of newly-improved creeks.

Fifteen-Year Key Performance Indicator (KPI)

Preserve flood protection capacity for 46 miles of newly improved creeks by providing funding for future maintenance.

How This Activity is Measured

Funding provided by the Program that leads to the preservation of flood protection capacity for the 46 miles of creek improvements funded under this program.

This has been calculated at $7.1 million in program reserve by 2016 set aside for future creek maintenance.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

In FY13, the Program set aside $526,009 for future maintenance of new improved channels.

Planned and Accomplished for FY13

1. With a 3% inflation adjustment, $526,009 was planned to be added to the reserve for this Outcome

   Accomplished
   The reserve now includes a total of $5,392,971 set aside for maintenance of creek channels completed in the Clean, Safe Creeks program.

STATUS — FULL PROGRAM: 2001-2013

Since the start of the Clean Safe Creeks program, the District has set aside funds for future creek maintenance of newly improved creeks constructed under activity 1.1. At the end of Fiscal year 2013, the District had set aside $ 5,392,971 to maintain 46 miles of newly improved channels.

Cumulative Progress toward KPI (2001-2013)

During the first 12 years of the 15-year program, the project has appropriated $5,392,971 towards maintenance of newly improved creeks constructed under Activity 1.1 Retained dollars have been carried forward into the Safe Clean Water (SCW) Program, and this reserve has been eliminated.

Significant Accomplishments (2001-2013)

- Set aside $380,000 in reserves for Fiscal Year 2002 (first year of Clean Safe Creeks program).
- Increased allocation each year using a 3% inflation factor

Financial information is provided in Appendix A

Challenges to Intended Outcome

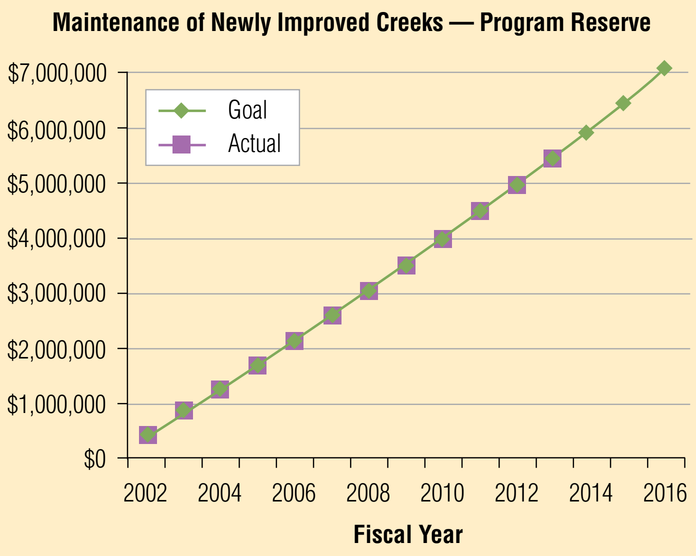
No challenges to intended outcome identified at this time.

Table 1.3.1 | Annual Performance

Maintenance for Newly Improved Creeks

Annual Reserve	
Fiscal Year	**Actual**
2001 – 2002	$380,000
2002 – 2003	$391,400
2003 – 2004	$403,142
2004 – 2005	$415,236
2005 – 2006	$427,693
2006 – 2007	$440,524
2007 – 2008	$453,740
2008 – 2009	$467,352
2009 – 2010	$481,373
2010 – 2011	$495,814
2011 – 2012	$510,688
2012 – 2013	$526,009
Total	**$5,392,971**

Graph 1.3.1 | 15 Year Program Graph


Maintenance of Newly Improved Creeks — Program Reserve

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with project E1-Vegetation Control and Sediment Removal for Flood Protection, which has similar or expanded KPIs. The KPIs for project E1 are to:

- Maintain 90 percent of improved channels at design capacity
- Provide vegetation management for 6,120 acres along levee and maintenance roads

Planned Activities for FY14

None, activity has been closed and replaced. Projected expenditures have been incorporated into the SCW program, which include costs for maintenance of newly improved channels.

Opportunities and Challenges Ahead

None, activity has been closed and replaced. Projected expenditures have been incorporated into the SCW program, which include costs for maintenance of newly improved channels.

Outcome 2

There is clean, safe water in our creeks and bays

The purpose of Outcome 2 of the Program is to protect and improve water quality in local creeks that flow into the San Francisco and Monterey Bays. Clean streams provide habitat for fish, frogs, and other wildlife and enhance the quality of life for residents of Santa Clara County. Outcome 2 supports this goal by funding programs that reduce and prevent pollution in our streams.

2.1 Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds

- Reduce urban runoff pollutions in south county cities

2.2 Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds

- Provide hazardous material response for Uvas/Llagas Watersheds. Respond to incidents within 2 hours of initial report. (Equivalent of approximately 180 incident responses)

2.3 Impaired water bodies improvement

- Reduce or prevent additional impairment of water

2.4 Neighborhood creeks frequently inspected and cleaned of litter and graffiti

- 60 creek cleanup events. Response time to remove litter and graffiti of less than 5 working days. Additional safety fence around creeks is installed or repaired as needed

2.5 Partnership with the County on general surface water quality protection program/outreach

- Assist County or other cities in reduction of pollutants in surface water

Activity 2.1

Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds.

The District met its commitment to reduce pollutants from urban runoff in the Uvas/Llagas watersheds by providing assistance to south county cities Morgan Hill and Gilroy for implementation of pollution prevention measures.

Fifteen-Year Key Performance Indicator (KPI)

Reduce urban runoff pollutants in south county cities.

How This Activity is Measured

Performance for this activity is measured by implementation of pollution prevention activities that are undertaken by the District either independently or collaboratively with other south county agencies.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

District efforts for this activity include reducing pollutants in the cities of Gilroy and Morgan Hill which are the only incorporated cities within the targeted area that are (a) not included within pre-existing Phase I municipal storm water efforts, (b) are subject to the more recent Phase II permitting, and (c) are within the jurisdiction of the Central Coast Regional Water Quality Control Board.

District staff administered year one of existing two-year agreements with both the City of Morgan Hill and the City of Gilroy to fund pollution prevention activities. These agreements were established in FY 2012 and are active for FY13 and FY14. Staff reviewed the mid-year and annual reports submitted by both cities, and processed invoices accordingly.

Approved funding for FY 13 was not completely used due to the following three factors: 1) Cancellation of the Environmental Art and Science Fair event (Morgan Hill didn't have to pay for prizes, room rental, or other incidental costs); 2) The way grant money was split up under the Scope of Services (funding for creek cleanups was over allocated and not needed); and 3) A lack of dedicated staff resources. City staff is requesting District consideration of transferring unused funds into year two, FY14, of the Agreement. The District is in the midst of processing the amendments requested.

Planned and Accomplished for FY13

1. Continue a grant funding partnership with City of Gilroy

   Accomplished: The District administered year one, FY13, of a 2-year agreement with the City of Gilroy to support pollution prevention activities in city. Pollution prevention activities which were accomplished by the City of Gilroy using the Program grant to help fund education campaign and litter cleanup events include the following:

   a. Organized and coordinated the below-noted creek litter cleanup efforts:

      i September 15, 2012 — City staff and 78 volunteers participated in the cleanup of a 2-miles stretch of Uvas Creek from Santa Teresa Boulevard to the Luchessa Avenue Bridge; resulted in the removal of 9.4 tons of solid waste

      ii February 13, 2013 — City staff and 58 volunteers covered a distance of about 0.59 miles on the Upper Miller Slough to remove the waste from 14 encampments; resulted in the removal of 5.92 tons of solid waste

  - **iii** May 18 and May 19, 2013 — City staff and 8 volunteers covered a distance of 2.1 miles of Uvas Creek from Santa Teresa Boulevard to Luchessa Avenue removing 3 tons of solid waste attributed to by homeless encampment activities
  - **iv** June 3 and 4, 2013 — City staff and California Conservation Corp began a process of improving the Uvas Creek area from the Santa Teresa Bridge to Silva Crossing for a total of 0.5 miles collecting 30 pounds (0.05 tons) of trash by performing trail clearing activities to increase use by hikers and bikers, instead of use by homeless

- **b.** During FY13, 120 cubic yards of solid waste, 5.192 miles of watercourse distance cleaned, 18.37 tons of solid waste during the above-noted four clean-up events
- **c.** Stormwater pollution prevention brochures (five) were translated into Spanish and distributed to Spanish-speaking community members at the Caser Chavez Festival held on March 30, 2013
- **d.** Hosted 2 campaign/public outreach events informational booths providing pollution prevention information: Approved funding for FY 13 was not completely used due to lack of staff resources at the City. City staff is requesting District consideration of transferring unused funds into year two, FY14, of the Agreement

2. Continue a grant funding partnership with City of Morgan Hill

Accomplished: The District administered year one, FY13, of a 2-year agreement with the City of Morgan Hill to support pollution prevention activities in the city. Pollution prevention activities which were accomplished by the City of Morgan Hill using the Program grant to help fund education campaign and litter cleanup events include the following:

- **a.** In cooperation with the District, City organized litter clean-up events during Coastal Cleanup Day on September 15, 2012 that resulted in participation of 27 volunteers and clean-up of a span of 3,255 feet (.62 miles) of West Little Llagas Creek, collecting 322 pounds of trash, including 50 pounds of scrap metal.
- **b.** Organized litter clean-up event during Creek Cleanup on May 18, 2013 that resulted in participation of 24 volunteers, collecting 372 pounds of trash in a span of 1.5 miles.
- **c.** City of Morgan Hill prepared several educational materials during the fiscal year. These included; flyer for the Art and Science Fair, nitrate reduction insert, and nitrate reduction point of sale education piece. The materials were printed and distributed to all school children via handouts to the schools. They were delivered to each school separately in prescribed groups that enable the school to easily distribute them via Friday Folders or similar means. In secondary schools, they were provided to art and science teachers to hand out to their students.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

District efforts for this activity are focused on reducing pollutants in the cities of Gilroy and Morgan Hill, in accordance with stated outcome in the Clean, Safe Creeks and Natural Flood Protection Program. The cities of Gilroy and Morgan Hill are the only incorporated cities within the area targeted for expansion of the urban runoff program to the Uvas/Llagas Watershed. Additionally, these are the only cities that are (a) not included within pre-existing Phase I municipal storm water efforts, (b) are subject to the more recent Phase II permitting, and (c) are within the jurisdiction of the Central Coast Regional Water Quality Control Board.

Between FY01 - FY12, the District has accomplished the following key tasks under this activity.

1. In FY02, the District provided technical assistance to the south county cities of Gilroy and Morgan Hill to develop their work plan to meet the March 1, 2003 submittal date for the Phase II National Pollutant Discharge Elimination Permit.

2. In FY03, the District provided technical assistance to the cities of Morgan Hill and Gilroy to implement Phase II National Pollutant Discharge Elimination Permit program elements such as, public education, public participation, illicit discharge detection and elimination, construction site store water runoff control, post construction storm water management, and pollution prevention for municipal operations.

   Utilizing resources, common work efforts, and expertise available through the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), funded under Clean, Safe Creeks Activity 2.5, the District funded the "Development Policies Comparison Report" for south county municipalities. This report became final in April, 2003 and will enable Morgan Hill and Gilroy to expedite the identification of tasks and products necessary to bring their planning procedures, protocols, and standards into compliance with requirements for new construction and redevelopments.

3. In FY04, the District funded outreach efforts that reach residents and staff of south county municipalities including "Overcoming Hurdles to Using Better Site Designs" and the "Got Bugs?" and "Got Paint?" radio campaigns. Furthermore, the District provided copies of the following outreach materials: "The Bay Begins at your Front Door!" "Keeping it All in Tune," "Pests Bugging You?" and "Home Maintenance Tips."

4. FY05, the City of Morgan Hill's Stormwater Management Plan (SWMP) was approved by the Central Coast Regional Water Quality Control Board (Regional Board) on March 23, 2005 with the District's assistance. The District also assisted the City of Gilroy by providing information and review during their SWMP development process.

5. In FY06, on July 8, 2005, the District contracted with the City of Morgan Hill to provide financial assistance for (1) public event exhibits, (2) artwork and display materials, (3) flyers, brochures, and outreach materials, and (4) storm water information kits for school age children that promote urban runoff pollution prevention in south Santa Clara County.

   The City of Morgan Hill used the funds provided by the District to: 1) unveil its new portable storm water display to the public at Morgan Hill's Earth Day Art and Science Fair and at its current location in the lobby of City Hall; 2) produce a brochure and distribute 5000 copies at their Mushroom Mardi Gras and Independence Day Festival; 3) distribute an additional 11,000 fliers as a utility billing insert mailer and 4) print and begin distributing to local schools outreach material including sampling kits for older students and 10,000 coloring books for younger ages students.

6. Between FY07 and FY 09, the District approved agreements with both the cities of Morgan Hill and Gilroy that provide annual funding in the amount of $15,000 to each city.

   The City of Morgan Hill utilized these funds to develop an urban runoff control ordinance, a Stormwater Pollution Prevention Plan for their corporation yard, surface water protection BMPs for public works, and storm drain inlet stenciling.

   The City of Gilroy utilized these funds to support its Maintain-a-Drain and storm drain stenciling programs. Both of these programs protect surface waters from pollution via debris, dumping and other non-storm water runoff into municipal storm drain inlets. Gilroy's Maintain-a-Drain allowed 115 residents to participate in storm drain inlet maintenance by providing them with collection bags and extra trash pick-ups for excess vegetative debris and cleaning the exterior of the grates around storm drain inlets. The Maintain-a-Drain program conducted events at 18 sites throughout the city and cleaned upwards of 360 storm drain inlets of trash and debris.

7. In FY10, the District approved 3-year agreements with both the cities of Morgan Hill and Gilroy to extend annual funding in the amount of $15,000 to each city during FY10 and increasing the funding to $20,000 for FY11 and FY12.

   The City of Morgan Hill utilized these funds for Pollution Prevention Campaigns and Events and litter clean-up events.

   The City of Gilroy utilized the funding to support both its "Maintain-a-Drain" and storm drain stenciling programs. The grant agreements with both cities allowed the flexibility for additional pollution prevention tasks to be identified and funded; and require additional reporting.

8. In FY11, the District continued the second year of the 3-year agreements with both the cities of Morgan Hill and Gilroy.

The City of Morgan Hill used the Program grant to help fund education campaign and litter cleanup events including, installation of a 150-feet storm water drainage swale and detention pond to remove storm water sediment runoff as a demonstration project for area developers; and organized multiple clean-up efforts. It hosted an Earth Day event on April 21, 2011; Organized litter clean-up events during the Coastal Cleanup Day on September 25, 2010, and City Beautification Day on May 21, 2011, that resulted in fifty bags (50) full of trash removed over a span of 1800 feet of West Little Llagas Creek.

The City of Gilroy also used District contracted funds to help fund supplies and protective equipment for 235 volunteers, to remove approximately 2,240 pounds of trash and litter from 190 storm drain inlets and catch basins, and to protect 16 miles of creek.

9. In FY12, the District continued the third and final year of the 3-year agreements with both cities of Morgan Hill and Gilroy. District finalized new 2-year agreements with the City of Morgan Hill and City of Gilroy to fund pollution prevention activities in FY13 through FY14.

Also, one grant agreement was completed with Committee for Green Foothills to fund creation of a dynamic map of the water features and watersheds of southern Santa Clara Valley, integrated with Google Earth Satellite imagery, under the Watershed Stewardship Grant program. The map, called ‘Watching our Watershed’ (WOW) is available on the internet for public use. The map will show the present day drainage network and watersheds, and historical wetlands and creeks of southern Santa Clara Valley. The WOW map can be accessed at ***www.valleywater.org/wow.aspx***.

Significant Accomplishments (2001-2013)

- Since FY 2002, the District entered into a grant funding partnership agreements with south county cities, Gilroy and Morgan Hill, to reduce pollutants from urban runoff

Challenges to Intended Outcome

The District was able to meet the outcome of assisting south County cities in reduction of pollutants from urban runoff, by funding programs that achieved this outcome. Due to a lack of staffing resources at the cities, they have not been able to fully utilize the grant funding provided under the agreement language.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be “closed and replaced,” meaning this Activity will be replaced in the Safe, Clean Water program with projects B2 (**Inter Agency Urban Runoff Program**) and B3 (**Pollution Prevention Grants and Partnerships**) that have similar or expanded KPIs. The KPIs for projects B2 and B3 are to:

- Install at least 2 and operate 4 trash capture devices at storm water outfalls in Santa Clara County (B2)
- Maintain partnerships with cities and County to address surface water quality improvements (B2)
- Support 5 pollution prevention activities to improve surface water quality in Santa Clara County either independently or collaboratively with south county organizations (B2)
- Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution (B3)

Planned Activities for FY14

The following are the milestones for Safe Clean Water projects B2 and B3 in FY 2014.

Inter Agency Urban Runoff Program (Project B2)

1. Develop and submit FY 2013 Annual Report of Pollution Prevention Activities by September 15, 2013 (completed)
2. Provide payment of District Contribution to the SCVURPPP Program by August 31, 2013 (completed)
3. Identify installation locations and install 2 (two) trash boom devices or 4 (four) trash net devices or a combination of the two by June 30, 2014 (2 complete)
4. Compile a summary report of operation and maintenance activities and trash volume collected for FY 2013 for the Annual Report by June 30, 2014
5. Provide information for annual Safe, Clean Water and Natural Flood Protection (SCW) report by June 2014

Pollution Prevention Grants and Partnerships (Project B3)

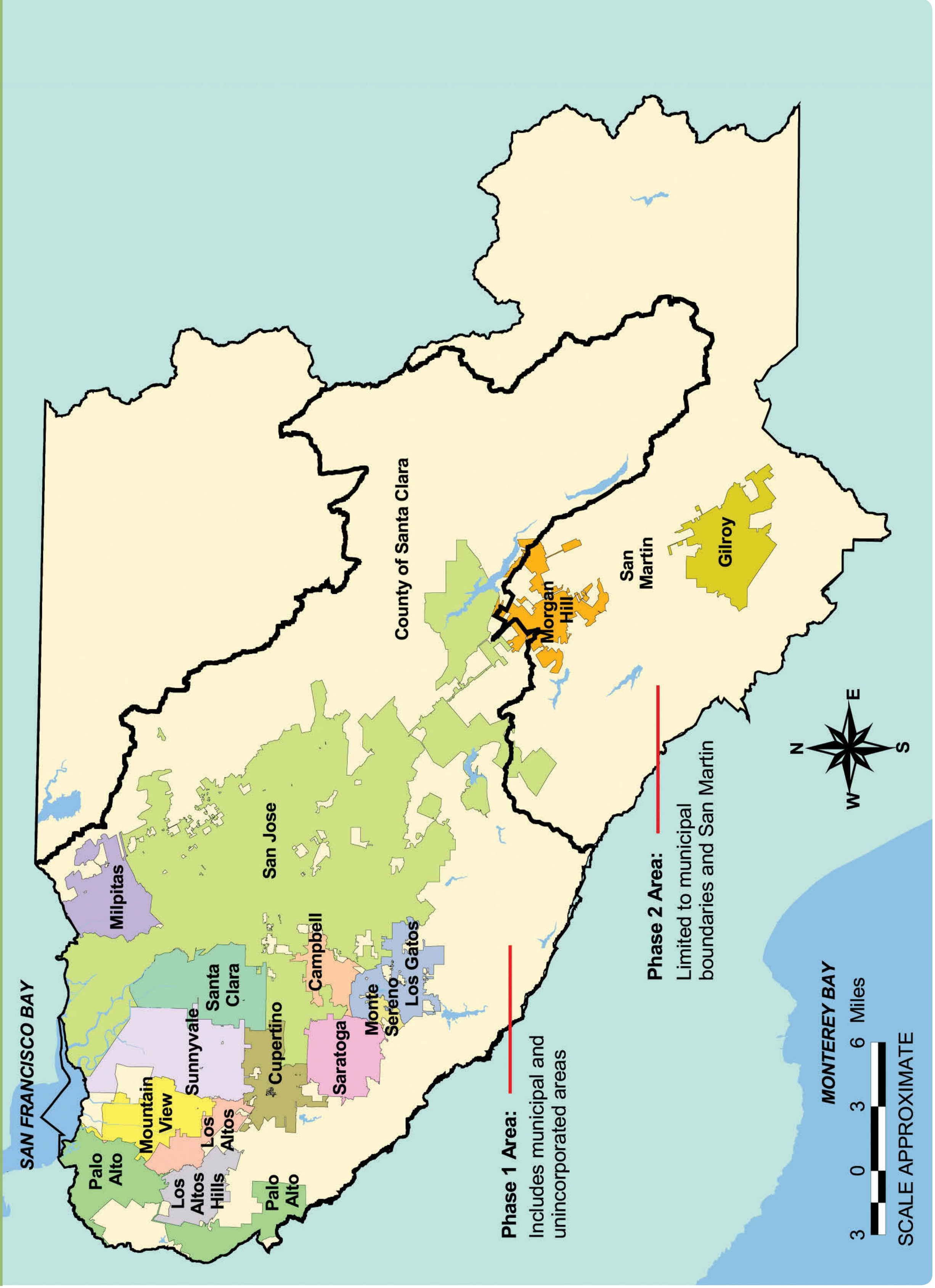
1. Present priority themes for grants and partnerships for the first 5-year implementation plan to the Board for approval by June 30, 2014 (completed)
2. Solicit grant and partnership proposals by September 2013 (completed)
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by June 30, 2014

Opportunities and Challenges Ahead

This outcome has been on track and has met the Clean, Safe Creeks KPI of reducing urban runoff pollutants by implementing pollution prevention by entering into partnerships with the south County cities over the life of the program. Going forward, these activities will be transitioned into Safe Clean Water Priority B (Reduce toxins, hazards and contaminants in our waterways) projects, B2 and B3.

Financial information is provided in Appendix A

Map of Santa Clara County Co-permittee Jurisdictions



Activity 2.2

Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds.

The District met its commitment, 100% percent of the time, to respond within 2 hours to hazardous material requests in the Uvas/Llagas watersheds. Under Safe, Clean Water, the District will expand its response to 100% of hazardous materials reports requiring urgent on-site inspection, in two hours or less, from the Uvas/Llagas watershed to countywide.

Fifteen-Year Key Performance Indicator (KPI)

Provide hazardous material response for Uvas/Llagas Watersheds. Respond to incidents within 2 hours of initial report.

How This Activity is Measured

Number of calls for south county and the time to respond.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

The District met its 2-hour response commitment 100% percent of the time within the Uvas/Llagas Watershed.

The District emergency response program staffs an in-house emergency response team, retains a hazardous waste contractor, and maintains inter-agency relationships to respond to a wide array of pollutants including the following.

- Combustible and Flammable Materials (gasoline, oil, organic solvents)
- Corrosive Chemicals (batteries, drain cleaners, ammonia)
- Oxidizers such as bleach and pool chemicals
- Toxic Chemicals (paints, pesticides, herbicides, chlorinated water, sewage)

During FY13 the District received notification of 109 incidents countywide with a total of 75 requiring on-site investigation, 55 of which required an urgent field response. District response to these reports averaged 56 minutes countywide. There were 5 reports that required on-site investigation for the Uvas/Llagas watershed. The District response for urgent (Uvas/Llagas) reports averaged 65 minutes and 100% of the urgent requests were responded to on-site within two hours.

Planned and Accomplished for FY13

Provide field response within 2 hours of notification for all urgent incidents to minimize the impacts of released pollutants.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

The Santa Clara Valley Water District achieved its KPI having met the 2-hour response time for over 98% of urgent incidents from 2001-2013.

Significant Accomplishments (2001-2013)

- The Emergency Response Team responded to 1,392 reports of pollutants in Santa Clara County creeks and reservoirs, with 106 of those being in the Uvas/Llagas watershed
- The Emergency Response Team met the 2-hour on-site response time for urgent incidents over 98% of the time countywide

Table 2.2 | Summary of Response Data

Fiscal Year	Total Reports	Total Field Responses	Uvas/Llagas Reports	Uvas Llagas Field Responses	Countywide Average Response Time	Uvas Llagas Average Response Time
2001 - 2002	68	45	4	1	63 minutes	36 minutes
2002 - 2003	137	79	12	6	60 minutes	67 minutes
2003 - 2004	150	68	7	3	57 minutes	72 minutes
2004 - 2005	113	64	10	5	56 minutes	59 minutes
2005 - 2006	122	86	12	8	53 minutes	67 minutes
2006 - 2007	107	77	9	8	51 minutes	64 minutes
2007 - 2008	115	71	9	6	65 minutes	70 minutes
2008 - 2009	116	77	7	7	58 minutes	59 minutes
2009 - 2010	93	54	11	6	54 minutes	54 minutes
2010 - 2011	128	82	9	4	41 minutes	46 minutes
2011 - 2012	134	89	11	6	50 minutes	58 minutes
2012 - 2013	109	75	5	5	56 minutes	65 minutes

Challenges to Intended Outcome

Occasionally multiple incidents occur on the same day and the current emergency response program may potentially experience difficulty meeting the 2 hour response goal. However it is rare that such an overlap prevents meeting performance standards and so staffing additional on-call responders to meet this potential challenge is not warranted based on historical performance. Other challenges to meeting timeliness performance standards include accessing remote locations, mobilizing equipment and supplies (boats and absorbents) for an on-water response, or encountering traffic when traveling to various locations in the County. Besides the challenges to meeting the timeliness performance standard the District's watershed emergency response program must maintain good working relationships with other response agencies and be trained and equipped to continue to respond effectively to a wide array of pollutants and hazardous substances.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with project B5, which has a similar or expanded KPI. The KPI for project B5 is to respond to:

- 100 percent of hazardous materials reports requiring urgent on-site inspection in two hours or less

Planned Activities for FY14

The planned activities for this project that support the Safe, Clean Water KPI for FY14 is to respond to 100% of hazardous materials reports requiring urgent on-site inspection in two hours of less.

Opportunities and Challenges

This project is on track and has consistently met its KPI over the 12 years span of Clean, Safe Creeks. This program will be continued under the Safe, Clean Water Program with scope expanded to extend the KPI to all responses countywide.

Financial information is provided in Appendix A

Activity 2.3

Impaired water bodies improvement

Fifteen-Year Key Performance Indicator (KPI)

Reduce or prevent additional impairment of water bodies in Santa Clara County.

How This Activity is Measured

Naming and describing the number and type of impaired water bodies and tracking the change in impaired water body designations within Santa Clara County.

The baseline will be established by using the Regional Water Quality Control Board's (Regional Board) designations of impaired water bodies when the Program's measure was adopted with updates provided after each subsequent listing cycle.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

Mercury in Guadalupe River Watershed

Guadalupe River Watershed has been ranked as high priority for use of this activity's funds since the District has the ability to reduce mercury to a certain extent via mitigation measures at reservoirs or within the bed and bank of the creeks on District rights-of-way. The planned and accomplished activities listed at the end of this section describe the actions the District has taken to address mercury remediation.

TMDL Impacts for the District

The Total Maximum Daily Load (TMDL) document defines the current and allowable pollutant levels for a specific water body and includes an implementation plan to achieve allowable levels of the pollutant that will restore the beneficial uses of the water body.

The San Francisco Bay Regional Board Final Total Maximum Daily Load Project Report and Proposed Basin Plan Amendment (TMDL for Mercury) proposes to restore beneficial uses by requiring the District to: a) reduce methyl mercury formation in Lake Almaden, and in the Calero, Almaden, and Guadalupe Reservoirs; b) conduct sediment removal projects in strategic areas, such as along Alamitos Creek and behind the Los Alamitos Drop Structure; and, c) conduct stream restoration projects in areas where mine wastes are eroding and/or where habitat is limited due to mine wastes. The planned and accomplished activities listed at the end of this section, describe the actions the District has taken to address mercury remediation.

Impaired Water Bodies Prevention

A monitoring program to track water quality related to mercury contamination was continued for Stevens Creek, Chesbro, Uvas, Lexington, and Coyote reservoirs. This monitoring program is also intended to provide reference data to compare to the Guadalupe River Watershed data that is being collected.

Treatment systems to reduce mercury in fish are now installed and/or operating in four reservoirs and one lake (Calero, Stevens Creek, Guadalupe and Almaden Reservoirs; and Lake Almaden). The treatment system in Guadalupe reservoir was replaced with an oxygenation system in April 2013. Due to vandalism, operation of this system is delayed until early FY 2014. With respect to the District's responsibility, available funding is expected to achieve the goals for the mercury TMDLs.

Table 2.3.1 | 2010 Clean Water Act Section 303 (d) List of Impaired Water Bodies in Santa Clara County

Pollutant	Water Body
Mercury	Almaden Reservoir, Almaden Lake, Alamitos Creek, Anderson Reservoir, Calero Reservoir, Guadalupe Creek, Guadalupe Reservoir, Guadalupe River, Anderson Dam, Stevens Creek Reservoir, Chesbro Reservoir, Uvas Reservoir
Trash	Coyote Creek, Guadalupe River, Matadero Creek, Permanente Creek, San Francisquito Creek, San Tomas Aquinas Creek, Saratoga Creek, Silver Creek, Stevens Creek
PCBs (Polychlorinated biphenyls)	Anderson Reservoir, Stevens Creek Reservoir, Pajaro River
Chlordane	Stevens Creek Reservoir, Pajaro River
Dieldrin	Stevens Creek Reservoir, Pajaro River
Diazinon	Calabazas Creek, Coyote Creek, Guadalupe River, Los Gatos Creek, Matadero Creek, Permanente Creek, Saratoga Creek, San Felipe Creek, San Francisquito Creek, Stevens Creek
Toxicity	Permanente Creek, Stevens Creek
Total Selenium	Permanente Creek
Temperature	Stevens Creek, Llagas Creek, Uvas Creek
Sedimentation/Siltation	San Francisquito Creek, Pajaro River, Llagas Creek, Pescadero Creek
Nutrients	Pajaro River, Llagas Creek
Fecal Coliform Pacheco Creek	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Sycamore Creek,
Low Dissolved Oxygen	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek
Sodium	Llagas Creek, Pajaro River, Sycamore Creek
Total Dissolved Solids	Llagas Creek
Turbidity	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek
Boron	Pajaro River
Chloride	Llagas Creek, Pajaro River, Sycamore Creek
Chlorpyrifos	Pajaro River, Llagas Creek
DDD (Dichlorodiphenyldichloroethane)	Pajaro River
Escherichia coli	Carnadero Creek, Corralitos Creek, Pajaro River
Nitrate	Carnadero Creek, Pajaro River
pH	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek

The current list of impaired water bodies within Santa Clara County is shown in Table 2.3.1. Activity 2.5 helped to address these impairments through support of the Santa Clara Valley Urban Runoff Pollution Prevention Program which involves the cities and the portion of the county which drain into San Francisco Bay. Activity 2.3 specifically funded efforts related to trash reduction by supporting the City of San José and its pilot project to address the impacts of illegal homeless encampments on streams. As it relates to pollutants that are generated by individuals and businesses, it is noted that the District has no land use authority or regulatory control over these actions.

Background

The main focus of this activity is to improve the water quality of our creeks, reservoirs and bays. Since the District has the responsibility for mercury cleanup in its facilities, District efforts in this outcome have focused on mercury remediation. In 1998, regulatory agencies identified specific pollutants that impaired our water bodies based on the available data at that time. In order to address these impairments, regulatory agencies have formulated a planning document that would limit the amount of pollutant levels in any water body by identifying the TMDL for these water bodies for each pollutant. This planning document has eight phases of development that are described in the table below. The goal of the TMDL document is to determine the current and allowable pollutant levels for a specific water body and prepare an implementation plan to achieve allowable levels.

The Regional Boards' current list of impaired water bodies in Santa Clara County is shown on the previous page.

The schedule for development of the TMDLs is the responsibility of the Regional Water Quality Control Boards.

Phases of Regional Boards TMDL Process

Eight phases in the TMDL process are defined by the California Regional Water Quality Boards, in concert with the EPA. These phases are defined below and are shown in Table 2.3.2.

1. Identify quality limited water bodies and prepare a list (303(d)) of waters that do not meet water quality standards.
2. Compile existing data, identify data gaps, develop study plans, inform and engage stakeholders.*
3. Data collection and interpretation to identify and quantify pollutant sources and to determine any linkage between those sources and resource impairment.*
4. Develop a technical TMDL report for impaired water bodies in order to achieve water quality standards, allow for seasonal variations, and provide a margin of safety.
5. Develop a TMDL implementation plan of control actions and a monitoring plan to develop and achieve the required load reductions.
6. Incorporate the technical TMDL, implementation plan, and monitoring plan into the Basin Plan.
7. Obtain regulatory approval of the TMDL and Implementation Plan from State Water Resources Control Board (State Water Board), Office of Administrative Law, and EPA.
8. Regional Boards and source owners implement control measures and monitor performance and results.

** District can assist the Regional Boards with this phase*

Table 2.3.2 | Status of TMDLs for Impaired Water Bodies (Phase definitions on previous page)

Pollutant	Water Body	TMDL Start Date[1]	2012 TMDL Phase Status (Completed/In Progress)							
			1	2	3	4	5	6	7	8
Mercury	**Guadalupe River Watershed** (Alamitos Creek, Calero Reservoir, Guadalupe Creek, Guadalupe Reservoir, Guadalupe River, Almaden Reservoir, Almaden Lake)	2001	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟦
Mercury	Almaden Reservoir, Stevens Creek Reservoir, Chesbro Reservoir, Uvas Reservoir	2012	🟩							
Trash	Coyote Creek, Guadalupe River, Matadero Creek, Permanente Creek, San Francisquito Creek, San Tomas Aquinas Creek, Saratoga Creek, Silver Creek, Stevens Creek	TBD	🟩							
PCBs (Polychlorinated biphenyls)	Anderson Reservoir, Stevens Creek Reservoir	TBD	🟩							
PCBs (Polychlorinated biphenyls)	Pajaro River	TBD	🟩							
Chlordane	Stevens Creek Reservoir	TBD	🟩							
Chlordane	Pajaro River	TBD	🟩							
Dieldrin	Stevens Creek Reservoir	TBD	🟩							
Dieldrin	Pajaro River	TBD	🟩							
Diazinon	Calabazas Creek, Coyote Creek, Guadalupe River, Los Gatos Creek, Matadero Creek, Permanente Creek, Saratoga Creek, San Felipe Creek, San Francisquito Creek, Stevens Creek	2000	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟦
Toxicity	Stevens Creek	2007	🟩							
Toxicity	Permanente Creek	TBD	🟩							
Total Selenium	Permanente Creek	TBD	🟩							
Temperature	Stevens Creek, Llagas Creek, Uvas Creek	TBD	🟩							
Sedimentation	Pescadero Creek	TBD	🟩							
Sedimentation	San Francisquito Creek	2000	🟩	🟩	🟩	🟦				
Sedimentation	Pajaro River, Llagas Creek	2003	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟦
Nutrients	Pajaro River, Llagas Creek	2012	🟩							
Fecal Coliform	Carnadero Creek, Llagas Creek, Pajaro River, Pacheco Creek	2007	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟦
Low Dissolved Oxygen	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek	TBD	🟩							

🟩 Phase Completed 🟦 Phase In Progress 🟪 Phase Completed/In Progress this Reporting Period

Table 2.3.2 | Status of TMDLs for Impaired Water Bodies (continued)

Pollutant	Water Body	TMDL Start Date[1]	2012 TMDL Phase Status (Completed/In Progress)							
			1	2	3	4	5	6	7	8
Sodium	Llagas Creek, Pajaro River, Sycamore Creek	TBD	🟩							
Total Dissolved Solids	Llagas Creek	TBD	🟩							
Turbidity	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek	TBD	🟩							
Boron	Pajaro River	TBD	🟩							
Chloride	Llagas Creek, Pajaro River, Sycamore Creek	TBD	🟩							
Pesticides (Chlorpyrifos, Diazinon, Malathion)	Pajaro River, Llagas Creek	2012	🟩							
DDD (Dichlorodiphenyldichloroethane)	Pajaro River	TBD	🟩							
Escherichia coli	Carnadero Creek, Pajaro River	TBD	🟩							
Nitrate	Llagas Creek, Pajaro River	2003	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟦
pH	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek	TBD	🟩							

🟩 Phase Completed 🟦 Phase In Progress 🟪 Phase Completed/In Progress this Reporting Period

[1] TMDL Start Date is year in which the Regional Board provided public notice of initiation for TMDL development.

Annually, the District reviews the list of impaired water bodies and prioritizes them for use of this activity's funds as high, medium, or low according to geographic scope, District ownership and/or control of pollutant sources, and ease of implementation of source controls.

Planned and Accomplished for FY13

1. Monitored results of the treatment system in Lake Almaden, and proceeding with development of a long term plan for addressing mercury contamination.

   Accomplished: The four solar powered circulators installed in Lake Almaden between 2006 and 2010 provide treatment of the entire lake. Reductions of methyl mercury production have been observed as high as 96% compared to baseline concentrations, but the devices are not effective enough to meet the TMDL requirements. Public meetings were conducted in FY 2013 to continue the process of evaluating remediation and restoration options for the lake.

2. Monitored the results of the treatment systems in the Almaden and Guadalupe reservoirs, and monitored existing conditions in Calero Reservoir. Continue to monitor activities to track water quality and monitor treatment system performance in Lake Almaden, Almaden Reservoir, and Guadalupe Reservoir.

   Accomplished: Monitoring activities were conducted.

3. Install an oxygenation system in Calero Reservoir.

   Accomplished: An oxygenation system was installed in Calero Reservoir in October 2011 and was tested during April 2012. The system was operated on a limited basis using generators during May and June 2013. PGE power is planned to be completed by early 2014.

4. Install an oxygenation system in Almaden Reservoir.

   Not completed: Due to reduced staffing resources, the system is scheduled for installation in FY 2014. The implications of the delay are minimal, since the TMDL does not specify a time frame for this to be operational.

5. Conduct the second round of sampling and reporting for the Coordinated Monitoring Plan (CMP).

   Accomplished: The second round of sampling and reporting was conducted for the CMP to monitor mercury in the fish and mercury loading to San Francisco Bay. In April 2010, the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board), approved the CMP between the District, Santa Clara County Parks, Guadalupe Rubbish, and the Mid-Peninsula Regional Open Space District.

6. Install an oxygenation system in Stevens Creek Reservoir.

   Accomplished: An oxygenation system was purchased and installed at Stevens Creek Reservoir to address mercury in fish within the reservoir, and to improve oxygenated conditions to support fish habitat downstream of the reservoir. The system was operated on a limited basis using generators during May and June 2013. PGE power is planned to be completed in FY 2014.

7. Install an oxygenation system in Guadalupe Reservoir.

   Accomplished: An oxygenation system was purchased and installed at Guadalupe Reservoir to address mercury in fish within the reservoir, to enhance oxygenated conditions to support fish habitat downstream of the reservoir. The system replaced the solar powered circulators which proved to be ineffective at controlling methyl mercury production in the reservoir. System start up was delayed due to vandalism.

8. Provide matching funds to the City of San José for an EPA grant to use homeless volunteers to reduce trash in Coyote Creek ("Clean Creeks, Healthy Communities").

   Accomplished: Matching funds were budged and provided to City of San José.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

The KPI for this activity was not met. The number of water bodies listed as impaired increased over this time period, and no water bodies that were impaired at the outset were reduced nor were others prevented. Listing of impaired water bodies is completed by the San Francisco Bay Regional Water Quality Control Program, and the District has no control over these listings. The District did however implement actions to address pollutants under its ownership/control.

Significant Accomplishments (2001-2013)

- Removed nearly 2000 kg of mercury from the Guadalupe watershed
- Installed and operated treatment systems for mercury in four reservoirs and one lake
- Conducted water quality monitoring at 4 reservoirs
- Upgraded treatment systems at 3 reservoirs based on monitoring results
- Support provided to the City of San José to help address the water quality impacts of illegal homeless encampments on streams

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with project B1, which has similar or expanded KPIs. The KPIs for project B1 are to:

- Operate and maintain existing treatment systems in 4 reservoirs to remediate regulated contaminants, including mercury
- Prepare plan for the prioritization of pollution prevention and reduction activities
- Implement priority pollution prevention and reduction activities identified in the plan in 10 creeks

Planned Activities for FY14

- Operate and Maintain treatment systems in Calero, Stevens Creek, and Guadalupe reservoirs
- Install treatment system in Almaden Reservoir
- Prepare bi-annual report to Regional Board by December 31, 2013
- Prepare draft 5-year implementation plan for prioritization of pollution prevention and reduction activities
- Prepare one-year annual status report to District Board of Directors

Opportunities and Challenges

In retrospect, the 15-year KPI of reducing or preventing impairment of water bodies in Santa Clara County by demonstrating the change in the number and type of impaired water bodies was extremely difficult to achieve without the ability to regulate land use activities leading to non-point source discharges. Safe Clean Water is an opportunity to try innovative new technologies to improve water quality and enhance environmental benefits. Under Safe Clean Water, this activity will be continued under project B1 (Impaired Water Bodies improvement), with expanded KPI's.

Financial information is provided in Appendix A

Activity 2.4

Neighborhood creeks frequently inspected and cleaned of litter and graffiti

The District met its obligation of conducting 4 major cleanup events per year. A clean up event is defined as a route consisting of sites that have been identified as high priority needing continuous litter and graffiti removal. The District met its 5-day response goal in contacting the public regarding any requests for service.

Fifteen-Year Key Performance Indicator (KPI)

60 creek cleanup events (4 per year). Response time to remove litter and graffiti is less than 5 working days. Additional safety fence around creeks is installed or repaired as needed.

How This Activity is Measured

- Annual number of cleanup event
- The number of calls for litter or graffiti removal service versus the time to respond, with a target of 100% response in less than 5 working days
- Amount of safety fence installed or repaired

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

Accomplished: The District met the target by conducting 4 cleanup events.
A cleanup event consists of a team cleaning up trash and debris at 309 high visibility or hot spot locations during the year. These hot spot locations are based on visible reaches, within 150 feet of bridges, along trails, and along frontage roads, of creeks where the District has easement or fee title. The list of high visibility locations is dynamic — locations can be added or deleted based on the amount of trash or graffiti found or not found.

Accomplished: The District met the target by responding to 100% of requests for litter or graffiti service either verbally, in writing, or by e-mail within a 5 day period. The Watersheds Division received 1,205 requests for service of which 734 were regarding litter, graffiti, and others, such as vegetation, signs (see summary of response Table 2.4.1).

Accomplished: During the fiscal year, .56 miles of safety fence were installed or repaired around creeks for a cumulative total of 9.11 miles; 426,015 square feet of graffiti were covered for a cumulative total of 4.14 million square feet since 2001.

See Table 2.4.1 for a summary showing a categorization of work requested.* These records are generated from complaints or requests that are either electronically submitted or manually uploaded to the Access Valley Water database from the hotline and other sources.

The database is not able to produce an average time to complete work due to variables and volume of records, however, provided is the number of work orders written and completed per public requests.

The District has a Memorandum of Agreement (MOA) with the City of San José for trash prevention and removal activities. The annual activities associated with the MOA for Trash Prevention and Removal Services include:

1. Illegal Encampment Cleanup Program
2. Partnered Cleanup Projects Program

This year program staff cleaned 86 sites and removed 1,921 cubic yards of trash and debris. The MOA expired with the City of San José this current year and a new agreement was drafted and approved by the board.

Two volunteer cleanup efforts, California Coastal Cleanup Day and the National Rivers Cleanup Day, are organized by the Creek Connections Action Group. This group consists of the District, County of Santa Clara, and the City of San José. Through these programs and its own efforts, the District works in partnership to remove trash, debris, and graffiti throughout Santa Clara County. The Program funds 60% of the described activities and accomplishments under this Activity.

Table 2.4.1 | Summary of Response Data 2012 - 2013

Job Description	Number of Public Requests	Work Orders Completed
Trash and Debris Removal	170	97
Fence Repair/Signs	169	85
Graffiti Removal	65	24
Other Misc.	183	unavailable
Vegetation Management	147	unavailable
Total	**734**	

**Requests for service do not always generate a work order. The request may not be in the District right-of-way, may involve a different agency, or may only be an inquiry for information. The work also may have been completed on an existing work order such as the Good Neighbor Route or a quarterly generated preventive maintenance work order.*

Planned and Accomplished for FY13

The District has planned events of quarterly cleanups of those areas identified as being highly visible as well as identified as areas that continually have litter and graffiti.

Accomplished: The status of this program continues to exceed the stated goal of 4 clean ups per year and its value of keeping our creeks clean. The District's hotline and on-line program "Access Valley Water" continues to be effective and successful in addressing public concerns to trash and graffiti.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

The KPI included a per year accomplishment that is consistent and has been achieved and completed every year since it was established. See table 2.4.2 below.

Table 2.4.2 | Neighborhood Creeks Cleanup

Fiscal Year	Number of Public Requests	Response Within 5 Days	Number of District Generated Work Orders	Litter (Cubic Yard)	Graffiti (Square Feet)
2001 - 2002	224	Not Available	269	5,500	111,262
2002 - 2003	332	Not Available	742	7,867	105,339
2003 - 2004	422	Not Available	1,693	4,233	283,015
2004 - 2005	556	Not Available	2,236	6,727	370,081
2005 - 2006	634	100%	2,533	6,866	366,972
2006 - 2007	644	98%	2,621	5,611	433,961
2007 - 2008	1,063	94%	2,452	2,854	401,333
2008 - 2009	769	98%	2,094	1,993	434,960
2009 - 2010	771	100%	2,099	1,574	392,579
2010 - 2011	524	100%	2,396	2,020	393,074
2011 - 2012	631	100%	2,993	2,039	424,980
2012 - 2013	734	100%	3,407	3,519	426,015
Total	**7,304**		**25,535**	**50,803**	**4,143,569**

Significant Accomplishments (2001-2013)

District staff assesses waterways and generates work orders to address priority areas of concern, which is in addition to public requests. The 12 year performance is summarized as follows:

- Public requests totaling 7,304
- Annual response time ranged from 94% to 100%
- Removal of 5,803 cubic yards
- Removal of 4,143,569 square feet of graffiti

The number of work orders has increased over the years and is attributed to three factors: (1) the ease of reporting (2) the increase in issues due to population growth (3) a combination of these first two elements.

Challenges to Intended Outcome (2001-2013)

The District has continued to measure the amount of trash removed from creeks and to measure the public's satisfaction with the District's response. From the surveys received over the years, the community appears satisfied with the overall reduction of trash from creeks within the 5-day response window.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with project B4 — Good Neighbor Program: Illegal Encampment Cleanup and B6 — Good Neighbor Program: Remove Graffiti and Liter, which have similar and expanded KPIs. The KPIs for project B6 are to:

- Conduct 60 cleanup events (4 per year) (B4)
- Respond to requests on litter or graffiti cleanup within 5 working days (B6)

Added KPI's for B4:

- Perform 52 annual cleanups for the duration of the Safe, Clean, Water program to reduce the amount of trash and pollutants entering the streams

Planned Activities for FY14

Conduct 4 clean up events and respond to the public service requests within 5 days.

Opportunities and Challenges

The District will keep to the number of creek clean up events as specified events in the measure. Staff anticipates that the gap in timeline between clean up events may trigger phone calls by residents for more frequent clean ups.

This Activity will be replaced by Safe, Clean Water program project B4 — Good Neighbor Program: Illegal Encampment Cleanup and project B6 — Good Neighbor Program: Remove Graffiti and Litter, which have similar and expanded KPIs. The KPIs for project B6 are to:

- Conduct 60 cleanup events (4 per year)
- Respond to requests on litter or graffiti cleanup within 5 working days

Added KPI's for B4:

- Perform 52 annual cleanups for the duration of the Safe, Clean, Water program to reduce the amount of trash and pollutants entering the streams

Financial information is provided in Appendix A

ACTIVITY 2.5

Partnership with the County on general surface water quality protection program/outreach

Fifteen-Year Key Performance Indicator (KPI)

Assist County or cities in reduction of pollutants in surface water.

How This Activity is Measured

The annual number of partnerships and collaborations supported countywide to address general surface water quality.

Measurement of the success of this outcome by the number of partnerships is viable and consistent with parameters used by regulatory agencies, such as State and Regional Water Quality Control Boards, to assess compliance with similar objectives and requirements within their storm water and urban runoff pollution prevention permits. Due to inherent difficulties using direct laboratory analysis to establish quantitative baselines and subsequent pollutant prevention performance and due to the assumptions necessary to infer quantitative pollutant reductions due to implementation of Best Management Practices (BMPs), regulatory agencies commonly utilize BMP implementation itself to assess storm water and urban runoff permit compliance. Likewise, Outcome 2.5 measures the number of partnerships as a direct indicator of BMP implementation and therefore pollutant reduction.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

The District fulfilled its plan in FY13 to "Assist county or other cities in reduction of pollutants in surface water," and further to "partner with the county on general surface water quality protection program/outreach." It accomplished this by:

1. Contributions and involvement with the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)
2. Contributions and involvement with the Green Business Program (GBP) administered by the County of Santa Clara Integrated Waste Management Division
3. Partnering with the City of San José, the U.S. Environmental Protection Agency as well as others on a pilot program to educate communities and encourage creek side encampment individuals to work. This pilot program is called Clean Creeks and Healthy Communities
4. Partnering with organizations throughout Santa Clara County (County) through the issuance of Clean, Safe Creeks funded grants

Number of Partnerships in FY13

- SCVURPPP
- Green Business Program
- City of San José/U.S. EPA on Clean Creeks and Healthy Communities

Grants in FY13

- Grant between District and Downtown Streets Team for the Coyote Creek Encampment Clean-up Program Project, funded through the 2013 Comprehensive Stewardship Grant Program (pollution prevention category)

Planned and Accomplished for FY13

1. Continue a funding partnership with the County Green Business Program by June 30th of each year through end of FY15 to provide further assurance of the District's commitment to clean surface water.

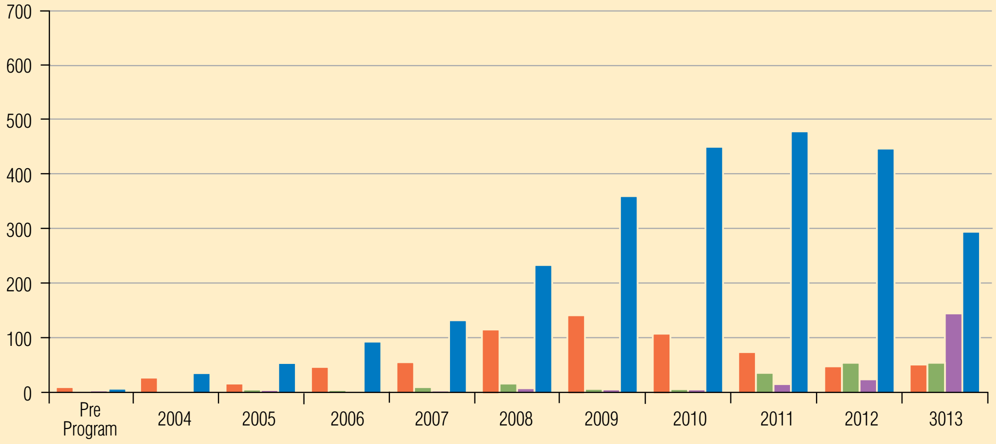
   Accomplished: The District continued to partner with County Green Business and provided funding for Green Business certifications in FY13. The District also evaluated the performance measures and metrics of the Green Business Program to ensure program requirements were met and to determine the effectiveness of the overall program. On June 28, 2013, the District's CEO approved a new 2-year agreement with the County in the amount of $200,000, capped at a maximum amount of $100,000 for FY 14 and $100,000 for FY15. The term of this agreement commenced on July 1, 2013 and shall expire on June 30, 2015.
2. Continue a funding partnership with the County and municipalities through the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) by June 30th of each year to contribute in a meaningful way to the collective effort of Santa Clara Valley agencies for regulation and management of urban runoff.

   Accomplished: District funded the SCVURPPP program and continued to support activities for the management of urban runoff. In 2013, SCVURPPP conducted water quality monitoring to determine stream health, assisted co-permittees to develop a long-term trash reduction program, and identified new pollutants of concern.

As shown in charts 2.5.1 and 2.5.2, the Program contributions and improved accountability mechanisms have coincided with improved County management of the GBP, all of which have contributed toward a significant boost in GBP effectiveness over the duration of Program funding. Through District contributions to the GBP since the beginning of FY2004, to-date, the Program has contributed to an increase of 291 certified entities throughout the County. More information about the GBP can be obtained from their website at ***www.greenbiz.ca.gov/AboutUsSCC.html***.

The number of certified green businesses has dropped over the past two years for a variety of reasons. With the continuing slow economy businesses are barely keeping heads above water and have reduced staffing levels. Many businesses no longer have dedicated staff to do voluntary projects such as Green Business certification. We have had

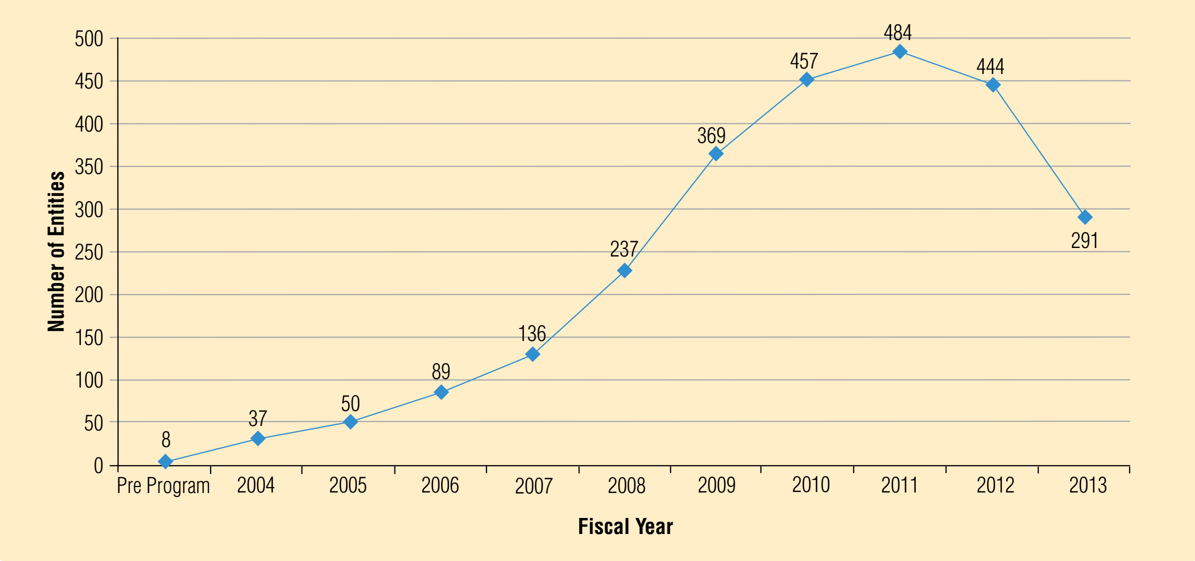
Graph 2.5.1 | Santa Clara County Green Business Certifications (Annual)



	Pre Program	2004	2005	2006	2007	2008	2009	2010	2011	2012	3013
New Certifications 🟧	9	29	16	40	54	121	141	104	73	42	47
Recertified 🟩	0	0	2	1	6	15	4	7	33	54	53
Decertified 🟪	1	0	1	0	1	5	5	9	13	28	147
Cumulative Number of Certified Businesses* 🟦	8	37	50	89	136	237	369	457	484	444	291

**Total New Certifications, Recertifications and Decertifications*

Graph 2.5.2 | Santa Clara County Green Business (Cumulative)



a number of businesses close or move out of Santa Clara County. Unlike in the height of the green movement for or five years ago, "green" doesn't have the allure that it once did, in part because of greenwashing in which there were dozens of labels and programs that diluted the true meaning of the word. There was also an increase in self certification programs by people trying to capitalize on the green movement. The Green Business Program continues to have rigorous standards, third party verification and is compliance based. Outreach to business was decreased in order to conserve funds; city staff has been reduced to the point that compliance checks for the Green Business Program cannot be top priority and thus take longer; and cities have not been referring businesses in the numbers that they did in the past. This is not only occurring in Santa Clara County, but this is the trend in counties throughout the state, as is evidenced in the "Green Businesses By County" spreadsheet.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

The District has met Activity 2.5 of assisting County or other cities in reduction of pollutants in surface water by entering into partnerships with the County and various organizations over the life of the program.

Since 2001, the District fulfilled its plan to "Assist County or cities in reduction of pollutants in surface water," and further to "partnership with the County on general surface water quality protection program/outreach" to provide pollution prevention activities throughout the Santa Clara Valley. This has been accomplished through efforts involving SCVURPPP, the County by providing funding for the Green Business Program, Clean Creeks and Healthy Communities pilot program, and Clean, Safe Creeks grant programs.

SCVURPPP

SCVURPPP is an association of 13 municipal agencies, the County of Santa Clara, and the Santa Clara Valley Water District that are all bound by a Memorandum of Agreement (MOA) to minimize runoff pollution to creeks and the bay. The MOA, with 13 municipalities and the County of Santa Clara to continue participation and funding of SCVURPPP, was signed in 1990 and updated in 1999, 2005, and 2006. On December 20, 2005, the District Board of Directors approved use of Clean, Safe Creeks and Natural Flood Protection Program Outcome 2.5 funds to support one third of the District's share of the budget for SCVURPPP beginning with Fiscal Year 2007.

The goal of SCVURPPP is to collaboratively work to fulfill the regulatory requirements of the San Francisco Bay Regional Water Quality Control Board's Municipal Regional Stormwater National Pollutant Discharge Elimination

System (NPDES) Permit (also known as MRP) in a manner that leverages resources from the various agencies to provide protection for local water resources. The MRP expires on November 30, 2014. SCVURPPP conducts and coordinates public outreach, conducts sampling and receives water monitoring data from others, and prepares various guidance manuals and reports.

SCVURPPP has programs to address the following pollutants of concern:

- Trash
- Dioxins
- Copper
- Sediment
- Mercury
- PCBs
- Pesticides

In 2013, SCVURPPP continued to conduct monitoring activities to evaluate stream health through the Creek Status Monitoring Program which evaluates Benthic Macroinvertabrate Assemblages and other parameters to determine stream health. In addition, SCVURPPP, in conjunction with the District and City of San José, is conducting two stressor identification studies in Coyote Creek to assess the cause of low Dissolved Oxygen levels and in the Guadalupe River to evaluate the occasional first flush fish kills. SCVURPPP is also actively involved in assisting the co-permittees with the development of a long-term trash reduction plan to reduce urban trash specifically in the waterways. SCVURPPP continues to work on monitoring of new "Pollutants of Concern" and how to understand and mitigate the impact of those pollutants to the creeks and bay.

County Green Business Program

In 2004, the District initiated development of protocols for outreach, selection, and assessment of partners in order to equitably solicit new Clean, Safe Creeks Surface Water Quality Partners. In 2003-2004, the District initiated a Clean, Safe Creeks Surface Water Quality Partnership Program to meet the objective of reducing pollutants in surface waters. In April 2004, the District utilized the Partnership Program to authorize funding the Green Business Program. The Green Business Program is managed by the County of Santa Clara's Integrated Waste Management Division. The Green Business Program is unique in that the surface water quality benefits accumulate as each certified business continues to implement a suite of activities from year to year. Activities promoted by the Green Business Program include: Environmental Compliance, Pollution Prevention, Water Conservation, Energy Conservation, and Recycling and Waste Reduction. All of these contribute directly or indirectly to surface water quality.

On May 12, 2010, the District's Chief Executive Officer approved an agreement with the County of Santa Clara extending our partnership with its Green Business Program (GBP) through a 3-year grant totaling $300,000. This contract continues funding previously approved by the District Board on April 4, 2004 and again on May 8, 2007. During FY12, the GBP certified 42 new businesses for a total of 444 Certified Green Businesses in Santa Clara County. During all of the years prior to initiation of Program funding, the GBP had only accumulated 8 certified entities. The performance of the Program-funded GBP in Santa Clara County far out-performs the Green Business Programs in the other Bay Area Counties. Certified Green Businesses in Santa Clara County now include a diverse range of corporations, non-profits organizations, and public agencies such as the Santa Clara Valley Water District, several Santa Clara County departments, and municipal departments within the cities of Cupertino, Gilroy, Palo Alto, San José, and Sunnyvale. In addition to its broader scopes of water and energy conservation, GBP certifications require entities to support (1) Pollution Prevention and (2) Surface Water Runoff Reduction measures beyond levels required by regulatory code and permit conditions.

On May 8, 2012, the District's Board of Directors approved a new 1-year agreement with the Santa Clara County in the amount of $100,000 to administer its GBP between July 1, 2012 and June 30, 2013. Then, on June 28, 2013, the District CEO approved a new 2-year agreement with the Santa Clara County in the amount of $200,000 to administer its GBP between July 1, 2013-June 30, 2015, with the goal of reducing pollutants entering the surface waters of Santa Clara County.

Before granting Green Business certification, the County of Santa Clara conducts a stringent audit to verify that pollution control BMPs are being implemented. Increasing the number of certified businesses will therefore result in more widespread BMP implementation, reduction of pollutant loading, and improved water quality for Santa Clara county creeks and bays. In addition to its broader scopes of water and energy conservation, GBP certifications require entities to support (1) Pollution Prevention and (2) Surface Water Runoff Reduction measures beyond levels required by regulatory code and permit conditions.

Measurement of the success of this outcome by the number of partnerships is viable and consistent with parameters used by regulatory agencies, such as State and Regional Water Quality Control Boards, to assess compliance with similar objectives and requirements within their storm water and urban runoff pollution prevention permits. Due to inherent difficulties using direct laboratory analysis to establish quantitative baselines and subsequent pollutant prevention performance and due to the assumptions necessary to infer quantitative pollutant reductions due to implementation of Best Management Practices (BMPs) regulatory agencies commonly utilize BMP implementation itself to assess storm water and urban runoff permit compliance. Likewise, Outcome 2.5 measures the number of partnerships as a direct indicator of BMP implementation and therefore pollutant reduction.

More information about the GBP can be obtained from their website at ***www.greenbiz.ca.gov/AboutUsSCC.html***.

Clean Creeks and Healthy Communities Pilot Program

The District has also partnered with the City of San José, the U.S. Environmental Protection Agency as well as others on a pilot program to educate communities and encourage creek side encampment individuals to work. This pilot program is called Clean Creeks and Healthy Communities. The purpose of this project is to demonstrate an integrated, multi-disciplinary approach to reducing trash in urban creeks that is a result of illegal encampments, illegal dumping, litter and other disruptive behaviors. Clean Creeks and Healthy Communities creates a 'community ownership' of targeted riparian corridors through a trash and litter abatement program and an outreach program that involves local residents.

Clean, Safe Creeks Grant Programs

To further support the Activity 2.5 goal, the District Board approved funding in the amount of $178,662 for five (5) pollution prevention projects under the 2011 Watershed Stewardship Grant Program, Pollution Prevention Countywide category. The projects included:

1. **Vision New America, Inc.** — Water Pollution Prevention Education for Ethnic Minority Youth and Communities
2. **Committee for Green Foothills** — MAPS for Clean Safe Creeks
3. **West Valley College** — Vasona Creek in West Valley College Storm water Pollution Reduction Plan
4. **Heart of the Valley, Services for Seniors, Inc.** — Pharmaceutical/Household waste Countywide Pollution Prevention Manual
5. **Friends of Los Alamitos Watershed** (FOLAW) — Los Alamitos Stewardship Grant

One additional project from the 2013 Comprehensive Stewardship Grant Program (pollution prevention category) was funded in the amount of $197,848; this was the Coyote Creek Encampment Clean-up Program Project by Downtown Streets Team.

Significant Accomplishments (2001-2013)

- Since 2001, District entered into agreements with Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) to fund urban runoff activities in Santa Clara County under the Clean, Safe Creeks and Natural Flood Protection Program
- In 2001, District entered into agreement with Silicon Valley Pollution Prevention Center to reduce pollutants in Santa Clara County Creeks
- The District has complied with the Municipal Regional Permit (MRP) requirements taking measures to reduce surface water pollution
- Since 2004, the District has entered into 5 Grant Funding Agreements with County of Santa Clara's Integrated Waste Management Division to support their Green Business Program
- Since 2011, District has carried out 2 grant cycles that included components to benefit Activity 2.5. A total of $178,662 was awarded for five (5) pollution prevention projects
- In Fiscal Year 12, District entered into Trash Prevention and Removal Memorandum of Agreement (MOA) with City of San José/U.S. EPA on Clean Creeks and Healthy Communities to reduce trash resulting from illegal encampments

Challenges to Intended Outcome (2001-2013)

The District was able to meet the outcome of assisting County or cities in reduction of pollutants in surface water, by funding programs that achieved this outcome. As described above, there have been several challenges to increasing green business certifications in the last two years.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with projects B2 (Inter Agency Urban Runoff Program) and B3 (Pollution Prevention Partnerships and Grants) that have similar or expanded KPIs. The KPIs for projects B2 and B3 are to:

- Install at least 2 and operate 4 trash capture devices at stormwater outfalls in Santa Clara County (B2)
- Maintain partnerships with cities and County to address surface water quality improvements (B2)
- Support 5 pollution prevention activities to improve surface water quality in Santa Clara County either independently or collaboratively with south county organizations (B2)
- Provide 7 grant cycles and 5 partnerships that follow pre-established competitive criteria related to preventing or removing pollution (B3)

Planned Activities for FY14

The following are the milestones for project B2 and B3 in FY 2014.

Inter Agency Urban Runoff Program (Project B2)

1. Develop and submit FY 2013 Annual Report of Pollution Prevention Activities by September 15, 2013 (completed)
2. Provide payment of District Contribution to the SCVURPPP Program by August 31, 2013 (completed)
3. Identify installation locations and install 2 (two) trash boom devices or 4 (four) trash net devices or a combination of the two by June 30, 2014 (2 installed)
4. Compile a summary report of operation and maintenance activities and trash volume collected for FY 2013 for the Annual Report by June 30, 2014
5. Provide information for annual Safe Clean Water annual report by June 2014

Pollution Prevention Grants and Partnerships (Project B3)

1. Present priority themes for grants and partnerships for the first 5-year implementation plan to the Board for approval by June 30, 2014 (completed)
2. Solicit grant and partnership proposals by September 2013 (completed)
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by June 30, 2014

Opportunities and Challenges

This outcome has been on track and has met the Clean, Safe Creeks KPI of assisting Santa Clara County and other cities in reduction of pollutants in surface water by entering into partnerships with the County and various organizations over the life of the program. Going forward, these activities will be rolled into Priority B projects, B2 and B3 of Safe, Clean Water.

Financial information is provided in Appendix A

Outcome 3

Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board

---

Outcome three provides for crucial environmental work to protect and restore habitats and encourage the return of endangered species such as the Chinook salmon, steelhead trout, salt marsh harvest mouse, California clapper rail and California red-legged frog. The plan includes the removal of non-native plants and re-vegetation. Community partnerships will help restore riparian and tidal habitat throughout Santa Clara County.

3.1 Vegetation Management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks.

- Creeks that are clear of plant growth that can impede water flow and reduce the flood protection capacity. Vegetation at mitigation sites properly monitored and managed to assure healthy habitat (Equivalent of 22,000 acres removed and maintained)

3.2 Community partnership to identify and implement restoration of fisheries, riparian habitat or wetlands

- Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife (Equivalent of 100 acres of tidal or riparian habitat created or restored)

ACTIVITY 3.1

Vegetation management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks.

During FY13 (year twelve of the Program), the District met the annual goal of 1,466 acres of vegetation management. Cumulatively over the first twelve years of the program the District has managed 19,638 acres, exceeding the target to date of 17,592 acres. With this trend set to continue, the fifteen year target of 22,000 acres would be met sometime in FY15, accomplishing the program goal over a year ahead of schedule. Work on this outcome will continue under Safe, Clean Water.

Fifteen-Year Key Performance Indicator (KPI)

Creeks that are clear of plant growth that can impede water flow and reduce the flood protection capacity; vegetation at mitigation sites is properly monitored and managed to assure healthy habitat (the fifteen-year target is equivalent to 22,000 acres of vegetation removed and maintained).

How This Activity is Measured

Number of acres of vegetation removed and managed.

Cumulative Progress toward KPI (2001-2013)

To date through Fiscal Year 2013 (June 30, 2013) work on 19,638 acres of the 22,000 acre target, for the life of the program has been completed. This represents 111.16% of the 17,597 acres planned through year 12. Relative to the

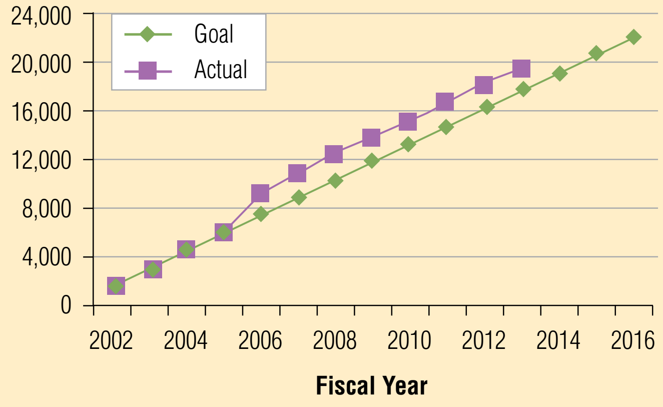
Table 3.1 | Annual Performance

Vegetation Management (Acres)

Fiscal Year	Annual	
	Planned	Actual*
2001 – 2002	1,467	1,168
2002 – 2003	1,467	1,504
2003 – 2004	1,467	1,537
2004 – 2005	1,467	1,561
2005 – 2006	1,467	3,591
2006 – 2007	1,466	1,481
2007 – 2008	1,466	1,466
2008 – 2009	1,466	1,466
2009 – 2010	1,466	1,466
2010 – 2011	1,466	1,466
2011 – 2012	1,466	1,466
2012 – 2013	1,466	1,466
Total	**17,597**	**19,638**

Graph 3.1 | 15-year Program

Acres of Vegetation Removed or Maintained



15 year program target, 19,638 acres represents 89.2% of the total target for the fifteen year program. Clearly, this lower rate is a result of CSC ending 3 years early. The remaining work will be performed in the Safe Clean Water Program.

Table 3.1.2 | Unit Cost

Fiscal Year	Actual Expenditures (Cash Basis)	Annual Actual Acre	Unit Cost
2001-2002	$1,017,267	1,168	$870.95
2002-2003	$1,330,546	1,504	$884.67
2003-2004	$1,655,774	1,537	$1,077.28
2004-2005	$1,628,306	1,561	$1,043.12
2005-2006	$3,112,449	3,591	$866.74
2006-2007	$1,500,357	1,481	$1,013.07
2007-2008	$1,654,690	1,466	$1,128.71
2008-2009	$2,171,329	1,466	$1,481.12
2009-2010	$2,006,662	1,466	$1,368.80
2010-2011	$2,222,876	1,466	$1,516.28
2011-2012	$2,633,087	1,466	$1,796.10
2012-2013	$2,437,280	1,466	$1,662.53

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

he KPI for this outcome; completion of 1,466 acres, per year, was met for FY 13.

Planned and Accomplished for FY13

Completion of 1,466 acres of vegetation management for environmental restoration and control of undesirable vegetation in streams and upland areas including:

- 364 acres of Revegetation Maintenance and Monitoring
- 619 acres (164 miles) of In-Stream Vegetation Control for flood conveyance
- 483 acres (68 miles) of right-of-way maintenance for work activities

STATUS — FULL PROGRAM: 2001-2013

The full program is ahead of the twelve year target of 17,597 acres with 19,638 acres completed for the program to date.

Significant Accomplishments (2001-2013)

Program accomplishments include annual maintenance on:

- 619 acres of vegetation management for flow conveyance
- 364 acres of revegetation maintenance
- 438 acres of maintenance access work to allow these activities to be completed

The fluctuation in unit cost is due to the differing cost of the activities covered under Outcome 3.1 and the varying quantities of work completed in each activity. For example, hand labor removal work is three to five times more costly than mechanical work (mowing). While the unit costs for each activity remain relatively stable, the quantities performed in each activity vary depending on the work required. In a year when more hand removal is needed due to limited access for equipment, unit costs will be higher, affecting the overall unit cost for the outcome.

Challenges to Intended Outcome (2001-2013)

The two main challenges to reaching the intended outcome were 1) the unforeseen costs of the program which accelerated expenditure beyond projected revenues, creating a deficit to the Outcome budget (examples include biological monitoring, water quality monitoring and other requirements that were not in place when the program was developed) and 2) the resources necessary to perform the work. It is unknown whether or not these challenges may continue into the new program.

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with projects D1 and E1 that have similar or expanded KPIs. The KPIs for these projects are to:

- Maintain a minimum of 300 acres of revegetation projects annually to meet regulatory requirements and conditions. (D1)
- Maintain 90 percent of improved channels at design capacity. (E1)
- Provide vegetation management for 6,120 acres along levee and maintenance roads. (E1)

Planned Activities for FY14

- Annual pruning of overhanging growth from adjacent properties on approximately 45 acres to provide clearance for maintenance access
- Mechanical mowing of slopes on approximately 363 acres
- Completion of supplemental irrigation on sites within the project defined establishment period by October 3
- Completion of site monitoring by February 15
- Completion of replacement plantings identified in the previous fiscal year's monitoring report by March 15
- Completion of plant basin maintenance and dri-water installation by May 15
- Completion of an average of 470 acres of Aquatic Herbicide applications by October 15
- Completion of an average of 30 acres on in stream mechanical mowing on Guadalupe River by November 1
- Completion of an average of 119 acres of in stream vegetation removal (hand labor) by March 1

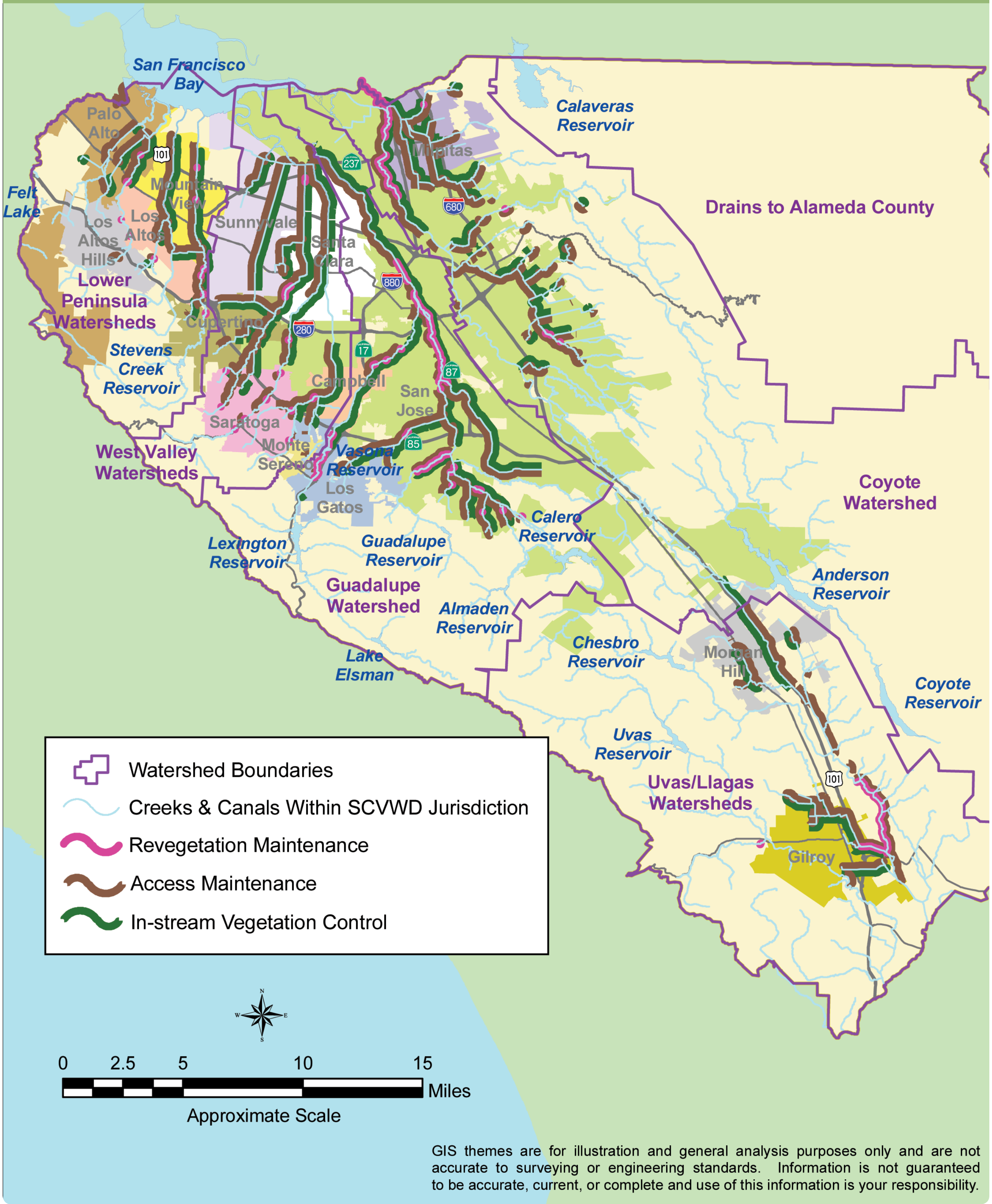
Opportunities and Challenges

The twelve year target for the program was met and exceeded. Challenges for the future include environmental regulatory issues and resource issues available to accomplish the KPI's under SCW.

Financial information is provided in Appendix A

Guadalupe River Downstream of Southern Pacific Railroad (SPRR) — Alviso
Photographs were taken looking downstream on Guadalupe River from the Southern Pacific Railroad Crossing.

Map 3.1.1 | Clean, Safe Creeks and Natural Flood Protection Program Vegetation Management Work Areas



GIS themes are for illustration and general analysis purposes only and are not accurate to surveying or engineering standards. Information is not guaranteed to be accurate, current, or complete and use of this information is your responsibility.

ACTIVITY 3.2

Community partnership to identify and implement restoration of fisheries, riparian habitat or wetlands.

The District has exceeded the Program goal of 100 acres of environmental restoration through both the planning and implementation of environmental enhancement grant projects. Through June 2013, 608.64 acres have been created or restored. The primary focus within this activity for FY13 was on the implementation of previous Board approved projects as well as development of the 2013 Comprehensive Stewardship Grant Program, which included funding for enhancement-related projects.

Fifteen-Year Key Performance Indicator (KPI)

Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. (Equivalent of 100 acres of tidal or riparian habitat created or restored).

How This Activity is Measured

Acreage of tidal or riparian habitat created or restored (i.e., restoration, rehabilitation, preservation, and creation).

District compensatory mitigation work is not included as part of environmental restoration for this activity.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

Actual performance for FY13 is completion of 8 projects for 38.97 acres of tidal or riparian habitat created or restored. This progress includes 4 planning projects and 4 implementation projects.

Planned and Accomplished for FY13

1. Continue to work with partners to create or restore tidal and riparian habitat on projects previously approved by the Board through the District's Environmental Enhancement Grant Program.

   Accomplished:

   - Completed the Soap Lake Floodplain and Riparian Easement Property Acquisition Project (25 acres)
   - Completed the Adobe Creek Restoration Project at Edith Park (0.32 acres)
   - Completed the Vegetation Management in South Bay Salt Pond's Alviso Unit (Pond A6) Project (13 acres)
   - Completed Llagas Creek Enhancement Proposal (0 acres)
   - Completed Adobe Creek Restoration Plan at Redwood Grove (0 acres)
   - Completed Little Arthur Creek Streamflow Stewardship Project (0 acres)
   - Completed Guadalupe River Aquatic Enhancement Program (0.65 acres)

2. Develop and implement the 2013 Comprehensive Stewardship Grant Program with remainder funds from the 2011 grant cycle.

   Accomplished:

   - Received 13 grant applications, including 6 enhancement project applications
   - Board approval of 7 grant projects for a total of $794,000
   - Board approved projects include 4 enhancement projects (see Table 3.2.1, implementation projects 27-30)

See Table 3.2.3 and Map 3.2.1 for District funded projects.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Number of acres: The goal to create or restore 100 acres of tidal or riparian habitat has been fulfilled with 608.64 acres of enhancements completed though FY2013. Projects in progress are expected to result in an additional 26.18 acres and 13,798 linear feet by June 30, 2016.

Cumulatively, 18 of 36 Board-approved enhancement projects have been completed, for a total of 608.64 acres. See Table 3.2.1 for completed* projects. Of the 36 projects approved by the Board through FY13, 18 projects are complete, 4 projects have been cancelled (one in FY11, two in FY12, one in FY13) and 14 projects are on target for completion by June 30, 2016.

Significant Accomplishments (2001-2013)

- Carried out 4 grant cycles that included components to benefit Activity 3.2
- Of the 6 planning projects funded through 2010 grants, 4 proponents successfully returned to the District for 2011 implementation grant funding
- In addition to creating or restoring tidal and riparian habitat, focus was placed on protection for endangered species; removal of fish migration barriers and installation of fish ladders; revegetation of native plant species; and removal of non-native, invasive species

Program Goal for Activity 3.2 is to create or restore 100 acres [total] tidal or riparian habitat. Charts 3.2.1 and 3.2.2 illustrate progress through FY13, with 519 tidal acres and 89.64 riparian acres created or restored.

Completed means construction finished with monitoring pending.

Table 3.2.1 | Tidal and Riparian Projects

Tidal Projects (acres)	Riparian Projects (acres)
Island Ponds Tidal Wetland Restoration Project (299 acres) Enhancements (5 acres)	Lower Silver Creek Flood Protection Project
Palo Alto Flood Basin Phragmites Removal Project (7 acres)	Upper Pajaro Watershed Vegetated Buffer Strip Project (2.5 acres)
Pond A8 Tidal Wetland Restoration (200 acres)	Palassou Ridge Wetland Management Project (40 acres)
Vegetation Management in South Bay Salt Pond's (SBSP's) Alviso Unit (Pond A6) planning project (0 acres)	Stevens Creek Corridor Restoration Project (Blackberry Farm) Phase 1 (4 acres)
Vegetation Management in South Bay Salt SBSP's) Alviso Unit (Pond A6) implementation project (13 acres)	Adobe Creek Upper Reach 5 Restoration Project (0.69 acres)
	Tick Creek Riparian Enhancements (2.3 acres)
	Soap Lake Floodplain and Riparian Easement Property Acquisition (25 acres)
	Adobe Creek Restoration Project at Edith Park (0.32 acres)
	Llagas Creek Enhancement Proposal (0 acres)
	Adobe Creek Restoration Plan at Redwood Grove (0 acres)
	Little Arthur Creek Streamflow Stewardship Project (0 acres)
	Guadalupe River Aquatic Enhancement Program (0.65 acres)

Challenges to Intended Outcome 2001-2013

Challenges throughout the Clean, Safes Creeks program included:

- Selecting critical projects for funding
- Balancing compensatory mitigation needs with enhancement opportunities
- Encouraging geographic distribution

Chart 3.2.1 | Acres of Tidal Habitat Created or Restored

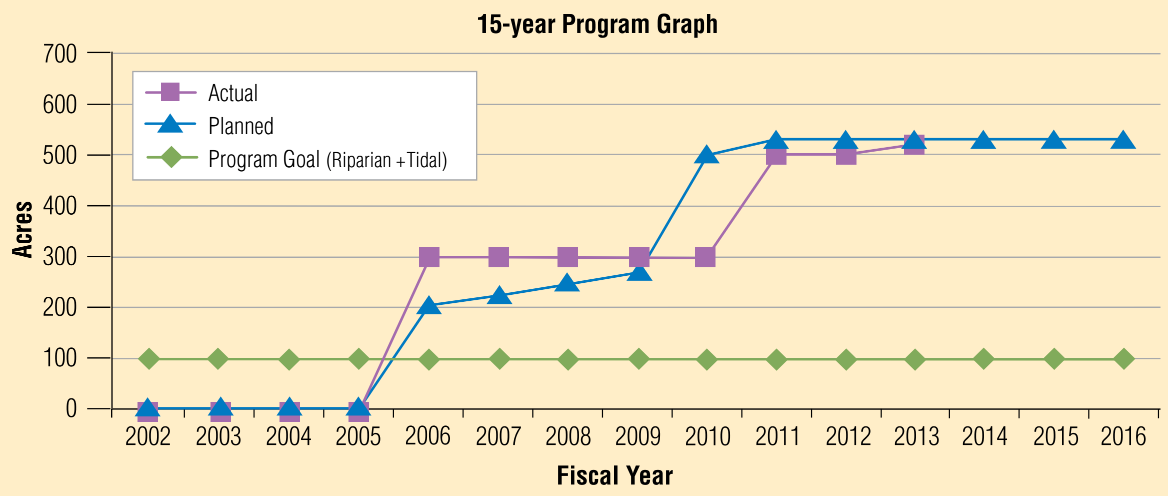
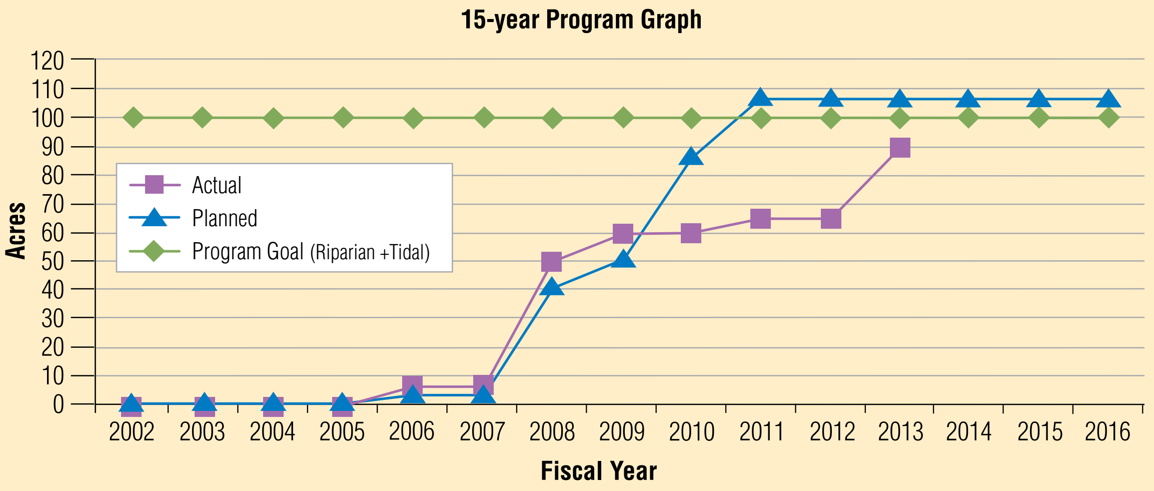


Chart 3.2.2 | Acres of Riparian Habitat Created or Restored



Notes:

1. See Table 3.2.3 for completed enhancement projects resulting in progress for the trend lines charted.

2. For additional enhancements see Table "Outcome 1: Flood Protection Projects" located at the end of the section titled Activity 1.1.

Table 3.2.2 shows the geographic distribution of Board-approved District grant funds from Fiscal Year 2001 through FY13 for Activity 3.2:

Table 3.2.2 | Board Approved District Grant Funds Fiscal Year 2001-2013

Watershed	Number of Projects	Total Acreage	Funding Approved
Lower Peninsula	12	24.54	$1,674,670
West Valley	4	6.70	$539,000
Guadalupe	8	229.78	$3,064,491
Coyote	4	344.00	$5,439,218
Uvas-Llagas	8	29.80	$993,638
All	**36**	**634.82**	**$11,711,017**

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity will be "closed and replaced," meaning this Activity will be replaced in the Safe, Clean Water program with projects that have similar or expanded KPIs. These projects will be designated D2, D3, D4, D6, and D8 in the Safe, Clean Water program. The KPIs for these projects are to:

- Revitalize at least 21 acres, guided by the 5 Stream Corridor Priority Plans, through native plant revegetation and removal of invasive exotic species (D2)
- Provide funding for revitalization of at least 7 of 21 acres through community partnerships (D2)
- Develop at least 2 plant palettes for use on revegetation projects to support birds and other wildlife (D2)
- Develop 5 Stream Corridor Priority Plans to prioritize stream restoration activities (D3)
- Provide 7 grant cycles and additional partnerships for $21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife, and providing new public access to trails (D3)
- Complete planning and design for two creek/lake separations (D4)
- Construct one creek/lake separation project in partnership with local agencies (D4)
- Use $6 million for fish passage improvements (D4)
- Conduct study of all major steelhead streams in the County to identify priority locations for installation of large woody debris and gravel as appropriate (D4)
- Install large woody debris and/or gravel at a minimum of 5 sites (1 per each of 5 major watersheds) (D4)
- Construct 3 geomorphic designed projects to restore stability and stream function by preventing incision and promoting sediment balance throughout the watershed (D6)
- Establish agreement with the US Fish and Wildlife Service to reuse sediment at locations to improve the success of Salt Pond restoration activities (D8)
- Construct site improvements up to $4 million to allow for transportation and placement of future sediment (D8)

Planned Activities for FY14

Project D2

1. Determine which stream corridor priority plan provides the most invasive plant removal benefit by December 30, 2013
2. Develop two plant palattes by June 30, 2014
3. Create list of viable community partnerships to carry out project goal by March 30, 2014

Project D3

1. Present priority themes for grants in FY14 to the Board for approval by August 2013
2. Solicit grant and partnership proposals by September 2013
3. Board approval of grants and partnerships by February 2014
4. Execute grant and partnership agreements by June 2014
5. Provide information for annual SCW status report to the Board by June 30, 2014

Project D4

No FY14 milestones. Work to begin in FY15.

Project D6

No FY14 milestones. Work to begin in FY18.

Opportunities and Challenges

Activity 3.2 is complete following the twelfth year of the program. Board approved projects which are still pending completion will continue to be implemented with an expected completion date of June 30, 2016.

Challenges moving forward as Safe, Clean Water is implemented include:

- Integrating enhancements and stewardship into other District operations and project activities

Financial information is provided in Appendix A

Table 3.2.3 | Outcome 3.2: Environmental Enhancement Projects
(Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

		Implementation Projects			Clean, Safe Creeks Key Performance Indicator	
Project Number	**Organization**	**Project Name**	**Watershed**	**Approved Program Amount**	**100 acres of tidal and/or riparian habitat created or restored (ac/lin ft)**	**Expected FY Completion**
①	SCVWD	Guadalupe Creek Cape Ivy Control	Guadalupe	$70,138	9.18 ac	Completed
②	SCVWD/USFWS	Island Ponds Tidal Wetland Restoration	Coyote	$420,000	299 ac	Completed
③	SCVWD/USFWS California Coastal Conservancy	Pond A-8 Tidal Wetland Restoration	Guadalupe	$2,100,000	200 ac	Completed
④	SCVWD/City of Cupertino	Stevens Creek Corridor Restoration Partnership Phase 1	Lower Peninsula	$401,884	4 ac	Completed
⑤	SCVWD/City of Palo Alto/ California Native Plant Society/ Save the Bay	Palo Alto Flood Basin — *Phragmites australis* Removal	Lower Peninsula	$50,975	7 ac	Completed
⑥	SCVWD	Adobe Creek Upper Reach 5 Restoration	Lower Peninsula	$62,490	0.69 ac	Completed
⑦	SCVWD	Invasive Exotic Vegetation Removal	Guadalupe	$167,000	2 ac	FY 2014
⑧	SCVWD	Guadalupe Creek U Frame Wall Removal	Guadalupe	$183,000	**Cancelled in FY 2011**	
⑨	SCVWD	Guadalupe River Aquatic Enhancement Program	Guadalupe	$155,683	0.65 ac	Completed
⑩	SCVWD	Soap Lake Floodplain and Riparian Easement Property Acquisition Program	Uvas Llagas	$250,000	25 ac	Completed
⑪	SCVWD	Carnadero Preserve — Tick Creek Riparian Enhancement	Uvas Llagas	$116,000	2.3 ac	Completed
⑫	SCVWD	Low Flow Channel Modification for Fish Passage Improvement (Silva Crossing at Miller Avenue)	Uvas Llagas	$37,413	**Cancelled in FY 2012**	
⑬	SCVWD	Lower Uvas Creek Fish Passage at Bolsa Road Ladder	Uvas Llagas	$33,000	**Cancelled in FY 2013**	
⑭	SCVWD	Upper Pajaro Watershed Vegetated Buffer Strip Project	Uvas Llagas	$240,000	2.5 ac	Completed
⑮	SCVWD	Palassou Ridge Wetland Management Project	Coyote	$969,218	40 ac	Completed

🟦 Complete 🟨 On Target ⬜ Cancelled

Table 3.2.3 | Outcome 3.2: Environmental Enhancement Projects

(Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

		Implementation Projects			Clean, Safe Creeks Key Performance Indicator	
Project Number	**Organization**	**Project Name**	**Watershed**	**Approved Program Amount**	**100 acres of tidal and/or riparian habitat created or restored (ac/lin ft)**	**Expected FY Completion**
16	SCVWD	Lower Silver Creek Flood Protection Project Enhancements	Coyote	$4,000,000	5 ac	Completed
17	Town of Los Altos Hills	Adobe Creek Restoration Project for Edith Park	Lower Peninsula	$83,960	0.32 ac, 240 if	Completed
18	City of Cupertino	Stevens Creek Corridor Park and Restoration, Phase 2	Lower Peninsula	$565,000	2.33 ac + 2040 if enhancements	FY 2016
19	City of Santa Clara	City of Santa Clara - Ulistac Natural Area Environmental Enhancement	Guadalupe	$106,978	4.95 ac	FY 2016
20	SCVWD	Invasive Spartina Monitoring and Control in South Bay Marshes and Creeks	Lower Peninsula (& other areas)	$75,000	5 ac	FY 2016
21	SF Bay Bird Observatory	Vegetation Management in SBSP's Alviso Unit	Guadalupe	$259,787	13 ac	Completed
22	Acterra	Adobe Creek Restoration Redwood Grove to Shoup Park	Lower Peninsula	$46,365	0.9 ac	FY 2016
23	Trout Unlimited	Little Arthur Creek Streamflow Stewardship Implementation Project	Uvas Llagas	$220,500	8,858 if	FY 2016
24	West Valley College	Tennis Court Wetland Enhancement Project	West Valley	$109,000	0.5 ac	FY 2016
25	West Valley College	Vasona Creek Enhancement Project: Channel Stabilization	West Valley	$200,000	400 if	FY 2016
26	West Valley College	Vasona Creek Vegetation Enhancement Project	West Valley	$180,000	5.7 ac	FY 2016
27	Acterra	San Francisquito Creek Habitat Enhancement Project	Lower Peninsula	$80,000	2,500 if	FY 2016
28	Town of Los Altos Hills	O'Keefe Preserve Purissima Creek Habitat Restoration Project	Lower Peninsula	$98,425	2 ac	FY 2016
29	Save The Bay	Palo Alto Baylands Tidal Marsh Transition Zone Restoration Project	Lower Peninsula	$75,000	2 ac	FY 2016
30	City of Los Altos	Adobe Creek Restoration at Redwood Grove – Phase 2	Lower Peninsula	$90,000	0.3 ac	FY 2016
			Subtotal	**$11,446,816.38**	**608.64 of 630 ac**	

🟦 Complete 🟨 On Target ⬜ Cancelled

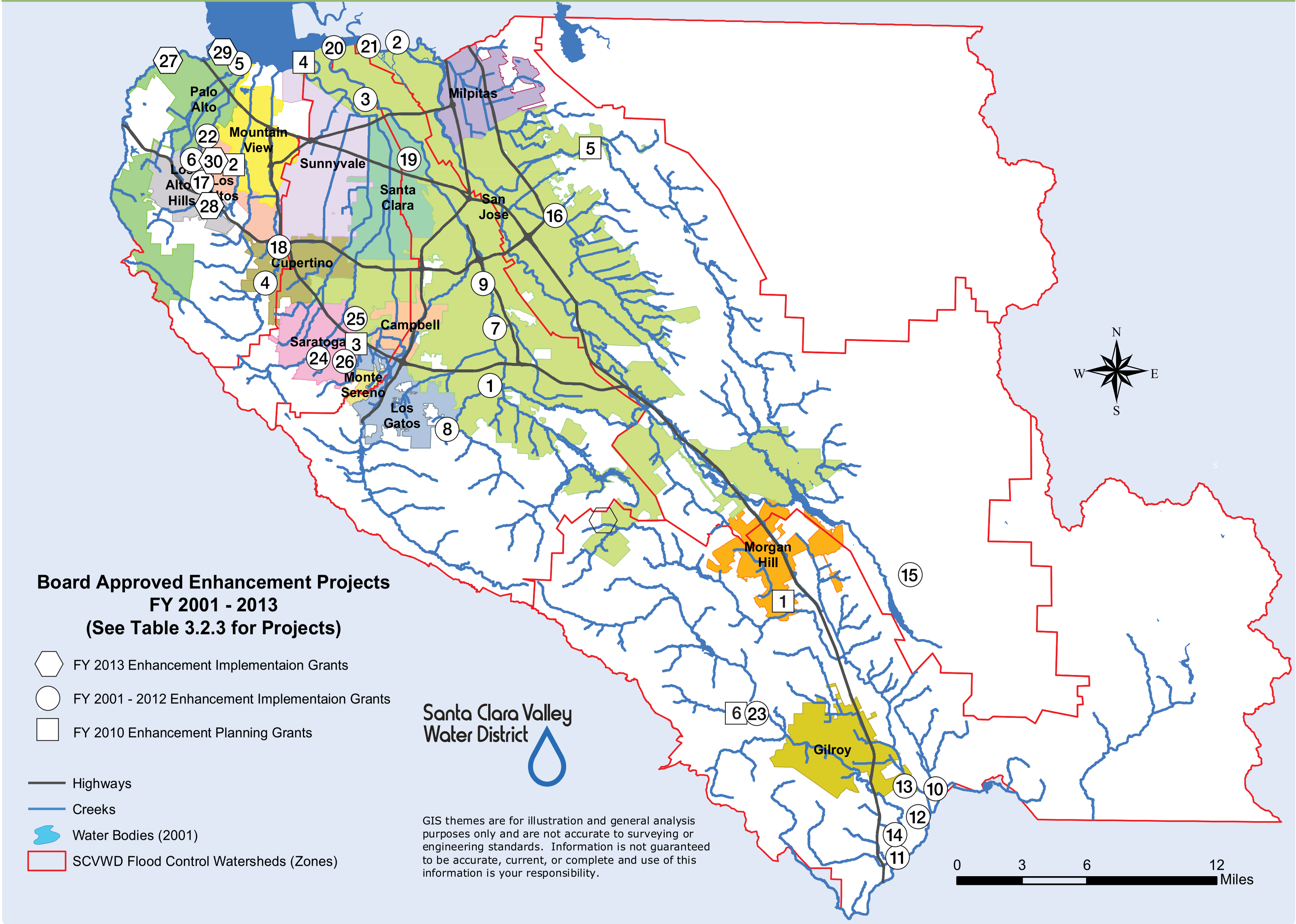
Table 3.2.3 | Outcome 3.2: Environmental Enhancement Projects

(Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

		Planning Projects*			Clean, Safe Creeks Key Performance Indicator	
Project Number	**Organization**	**Project Name**	**Watershed**	**Approved Program Amount**	**100 acres of tidal and/or riparian habitat created or restored (ac/lin ft)**	**Expected FY Completion**
1	City of Morgan Hill	Llagas Creek Enhancement Proposal	Uvas Llagas	$72,202	0 ac	Completed
2	Acterra	Adobe Creek Restoration Plan at Redwood Grove	Lower Peninsula	$45,571	0 ac	Completed
3	West Valley College	Vasona Creek Stream and Trails Enhancement Project	West Valley	$50,000	0 ac	FY 2014
4	San Francisco Bay Wildlife Society	Vegetation Management in SBSP's Alviso Unit (Pond A6)	Guadalupe	$21,905	0 ac	Completed
5	City of San José	Design Development of Upper Penitencia Creek Stream Enhancements	Coyote	$50,000	**Cancelled in FY 2012**	
6	Trout Unlimited	Little Arthur Creek Streamflow Stewardship Project	Uvas Llagas	$24,523	0 ac	Completed
			Subtotal	**$264,201.00**		
			Total	**$11,711,017.38**		

🟦 Complete 🟨 On Target ☐ Cancelled *No direct CSC Plan credit since these are planning projects

Map 3.2.1 | Board Approved Environmental Enhancement Projects Fiscal Year 2001-2013



GIS themes are for illustration and general analysis purposes only and are not accurate to surveying or engineering standards. Information is not guaranteed to be accurate, current, or complete and use of this information is your responsibility.

Outcome 4

There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate

Outcome 4 of the Clean, Safe Creeks and Natural Flood Protection Program (Program) recognizes the District's unique position in being able to provide public access and recreational opportunities along riparian corridors, some of the few remaining natural areas in highly urbanized Santa Clara County.

Outcome 4 objectives complement the District's efforts to facilitate development of joint-use and joint-trail agreements on District land with partners, e.g. local municipalities, Santa Clara County, and others, and to incorporate trails into its capital projects wherever feasible.

Specifically, Outcome 4 addresses the following four objectives:

- Partnerships to provide public access to 70 miles of open space and/or trails along creeks
- Increase in community recreational opportunities
- Increase number of bicycle paths for alternative transportation
- Opportunities for open space, trails and parks incorporated into flood protection projects

4.1 Provide additional trails and open space along creeks and in watersheds.

- Community partnership to identify and provide public access to 70 miles of open space or trails along creeks

ACTIVITY 4.1

Provide additional trails and open space along creeks and in watersheds.

Through June 2013, the trails program has achieved 70.89 miles of public access to trails; this exceeds the program's goal of 70 miles of trails and open space by FY16.

Fifteen-Year Key Performance Indicator (KPI)

Community partnership to identify and provide public access to 70 miles of open space or trails along creeks.

How This Activity is Measured

Miles of additional trails or acres open space provided along creeks and in watersheds.

STATUS — CURRENT REPORTING PERIOD: FY13

Current Performance in FY13 (KPI)

Actual performance for FY13 is completion of 3 projects for public access to an additional 4.15 miles of trail.

Planned and Accomplished for FY13

1. Continued work on 9 projects previously approved by the Board through the District's Trail and Open Space Grant Program.

   Accomplished:

   - Completed the Madrone Channel Trail Project (3 miles)
   - Completed portion of the Three Creeks Trail — Trestle and Interim Improvements Project (0.90 miles)
   - Completed the Alviso Adobe Renovation Project (0.25 miles)

2. Develop and implement the 2013 Comprehensive Stewardship Grant Program with remainder funds from the 2011 grant cycle.

   Accomplished:

   - Received 13 grant applications, including 3 trail project applications
   - Board approved 7 grant projects for a total of $794,000
   - Board approved projects include 2 trail projects Ronan Channel Trail — Interim Project Phase 1, (City of Gilroy), and Los Alamitos Creek-Coleman Road Undercrossing (City of San José)

See Table 4.1.4 and Map 4.1.1 for District funded trail and open space projects.

STATUS — FULL PROGRAM: 2001-2013

Cumulative Progress toward KPI (2001-2013)

Number of miles: The goal to provide public access to 70 miles of open space or trails along creeks has been fulfilled with 70.89 miles of trails and open space completed though FY2013. Projects in progress are expected to result in an additional 1.25 through completion of grant projects by June 30, 2016.

Cumulatively, 43 of 52 Board-approved trail and open space projects have been completed, for a total of 70.89 miles. See Table 4.1.2 for agreements approved by the Board, presented in categories that include projects funded through development of joint trail agreements and joint use agreements, and projects funded by trail and open space grant agreements. Table 4.1.4 includes one additional project for a total of 44 completed projects; this accounts for additional unanticipated trail length added to another trail grant agreement.

Table. 4.1.1 illustrates progress toward meeting Clean, Safe Creek goals for Activity 4.1 on a fiscal year basis (FY01-FY13):

Table 4.1.1 | Annual Performance

Public Access Provided (miles of trails)

Fiscal Year	Actual	Cumulative
2001 – 2002	1.20	1.20
2002 – 2003	1.13	2.33
2003 – 2004	2.98	5.31
2004 – 2005	2.36	7.67
2005 – 2006	23.80	31.47
2006 – 2007	2.50	33.97
2007 – 2008	13.26	47.23
2008 – 2009	7.00	54.23
2009 – 2010*	10.80	65.03
2010 – 2011	0	65.03
2011 – 2012	1.71	66.74
2012 – 2013	4.15	70.89

Chart 4.1.1 | 15-year Program

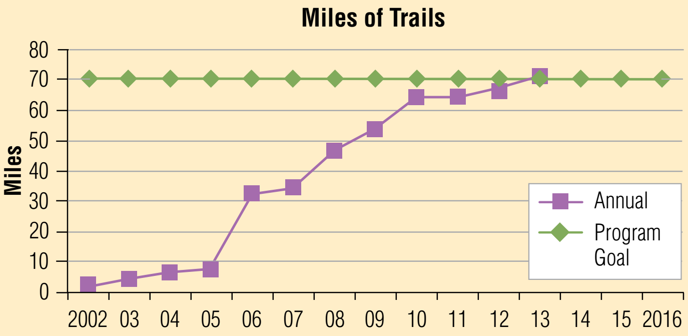


Table 4.1.2 | Trail Miles by Type of Agreement

Trail Development by Agreement	Number of Agreements	FY12 Annual Trail Progress (public access provided in miles)	Cumulative Trail Progress (public access provided in miles)	Total Miles to be Built
Joint Trail Agreements	12	0	20.26	30.53
Joint Use Agreements	11	0	9.06	10.25
Trail Grant Agreements – 2003 cycle	11	0	32.51	32.51
Trail Grant Agreements – 2005 cycle	5	0	3.20	3.2
Trail Grant Agreements – 2010 cycle	5	3.00	4.61	4.99
Trail Grant Agreements – 2011 cycle	6	1.15	1.25	1.55
Trail Grant Agreements – 2013 cycle	2	0	0	1.55
Total	**52**	**4.14**	**70.89**	**83.73**

Significant Accomplishments (2001-2013)

- Carried out 5 grant cycles that included components to benefit Activity 4.1
- Created public access to over 70 miles of trail
- Funded projects were distributed geographically across Santa Clara County, with between 6 and 12 projects in each major watershed

Program Goal for Activity 4.1 was to provide public access to 70 miles of open space or trails along creeks. Chart 4.1.1 illustrates progress through FY13, with 70.89 miles made accessible to the public.

Table 4.1.3 shows the geographic distribution of completed trail projects utilizing Clean, Safe Creeks funds from FY01 through FY13 for Activity 4.1:

Table 4.1.3 | Geographic Distribution of Completed Trail Projects

Watershed	Number of Projects	Total Trail Mileage	Funding Approved*
Lower Peninsula	8	8.37	$928,081
West Valley	7	13.79	$482,500
Guadalupe	11	15.63	$750,000
Coyote	12	27.15	$1,194,400
Uvas-Llagas	6	5.95	$349,550
All	**44**	**70.89**	**$3,704,531**

Challenges to Intended Outcome

- Complex process of working with multiple agencies, obtaining permits and managing various schedules
- Limited community partner resources for dedicated work on trail projects
- Placement of trails along creeks and in the watersheds must consider ecological values in their development
- Public concern about trail alignments may prove inconsistent with trail objectives

LOOKING FORWARD

How this project will transition to Safe, Clean Water Program

This Activity is complete, meaning this Activity has met the original KPI as described above. Additional trail miles will be completed within the first three years of the Safe, Clean Water program as existing contracts are completed. The objectives of this project will be carried forward by the project D3 in the Safe, Clean Water program. The KPIs for D3 are to:

- Develop 5 Stream Corridor Priority Plans to prioritize stream restoration activities
- Provide 7 grant cycles and additional partnerships for $21 million that follow pre-established criteria related to the creation or restoration of wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife, **and providing new public access to trails**

Planned Activities for FY14

Project D3

1. No FY14 milestones. Trail grant opportunity and related milestones scheduled for FY15.

Opportunities and Challenges

Outcome 4.1 is complete following the twelfth year of the program. Additional projects funded with Clean, Safe Creeks under this outcome will continue to be implemented with an expected completion date of June 30, 2016.

Challenges moving forward as Safe, Clean Water is implemented include:

- Placement of trails along creeks and in the watersheds must consider ecological values in their development
- Public concern about trail alignments may prove inconsistent with trail objectives

Financial information is provided in Appendix A

Table 4.1.4 | Outcome 4: Trails and Open Space Completed Projects FY01-FY13

Map No.	Project	Partnering Agency	Watershed	Clean, Safe Creeks Grant Funding	Total Project Funding	FY Completed	Trails Proposed (Miles)	Trails Completed (Miles)	Open Space Access (Acres)	Trail Surface: Paved or Unpaved
	TYPE: Joint Trail Agreements									
①	**Guadalupe 12** (Blossom Hill to Chenowyth)	San José	Guadalupe			03-04	0.8	0.8		Paved
②	**Guadalupe 13** (Coleman to Almaden Lake)	San José	Guadalupe			03-04	0.19	0.19		Paved
③	**Coyote Creek Trail** (HWY 237 to Montague Expwy)	San José	Coyote			04-05	2.36	2.36		Unpaved
④	**Saratoga Creek** (San José) (Bollinger Rd to English Dr)	San José	West Valley			05-06	1.1	1.1		Paved
⑤	**Guadalupe River Trail** – Downtown (880 to 280)	San José	Guadalupe			05-06	2.7	2.7		Paved
⑥	**Guadalupe Creek Trail** – Interim (Almaden to Meridian)	San José	Guadalupe			06-07	0.8	0.8		Unpaved
⑦	**Los Gatos Reach 4** (Lonus Street to Auzerais Ave)	San José	Guadalupe			07-08	0.5	0.5		Paved
⑧	**Penitencia Creek Trail** – Reach 2a (Noble to Percolation Pond #2)	San José	Coyote			07-08	0.62	0.62		Unpaved
⑨	**Guadalupe River Trail** – Lower Interim (Gold St to 880)	San José	Guadalupe			07-08	6.6	6.6		Unpaved
⑩	**Thompson Creek/Lower Silver Creek** (Tully to Aborn)	San José	Coyote			07-08	1.77	1.77		Unpaved
㉜	**Guadalupe Creek Trail** – Interim (Meridian to Singletree)	San José	Guadalupe			09-10	0.9	0.9		Unpaved
㉝	**Penitencia Creek Trail** – Reach 3-5 (Piedmont Road to Jackson Ave)	San José	Guadalupe			09-10	1.58	1.58		Paved
㉞	**Penitencia Creek Trail** – Reach 6c (Maybury to King)	San José	Guadalupe			09-10	0.34	0.34		Unpaved
						SUBTOTAL	**20.26**	**20.26**		
	TYPE: Joint Use Agreements									
⑪	**Coyote Creek** – Reach 4B (Idlewood to Capital Expwy)	San José	Coyote			01-02	1.2	1.2		Paved
⑫	**Regnart Creek** (at De Palma Lane)	Cupertino	West Valley			02-03	0.04	0.04		Paved
⑬	**San Pedro Ponds** (in and around ponds)	Morgan Hill	Uvas-Llagas			02-03	1.09	1.09		Unpaved
⑭	**Uvas Creek** (Santa Teresa to Christmas Hill Park)	Gilroy	Uvas-Llagas			03-04	0.33	0.33		Paved
⑮	**Saratoga Creek** (Mitty Way to Bollinger)	Cupertino	West Valley			03-04	0.47	0.47		Paved
⑯	**Calabazas Creek** (237 to Mission College Blvd)	Santa Clara	West Valley			03-04	1.19	1.19		Paved
⑰	**Stevens Creek** (Shoreline to Sleeper)	Mountain View	Lower Pen			08-09	3.68	3.68		Paved
⑱	**West Little Llagas** (La Crosse Dr to Watsonville Rd)	Morgan Hill	Uvas-Llagas			08-09	0.72	0.72		Paved
㉟	**San Francisquito Creek** (HWY 101 to Palo Alto Baylands)	Palo Alto	Lower Pen			09-10	0.34	0.34		Paved
						SUBTOTAL	**9.06**	**9.06**		

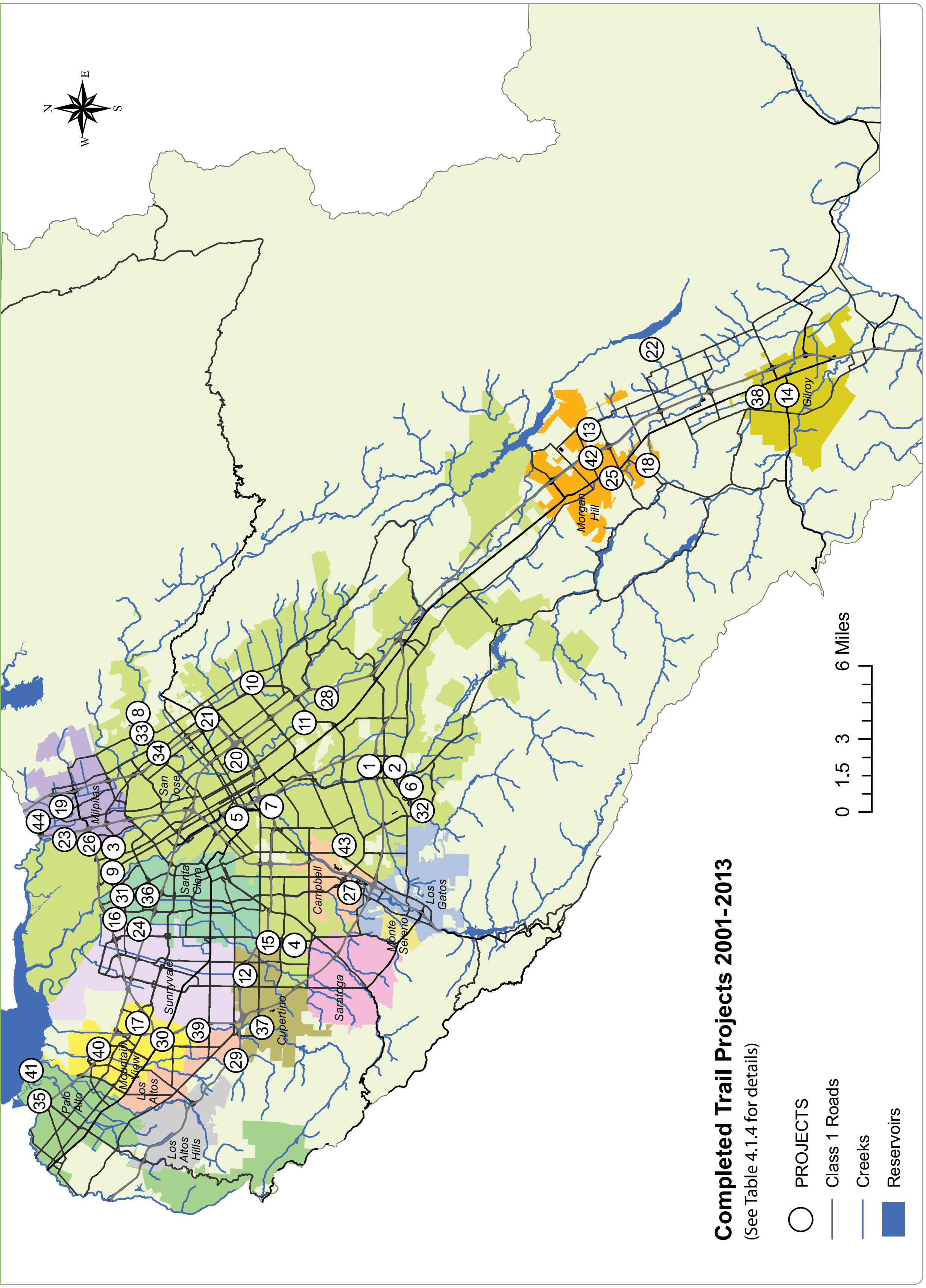
Table 4.1.4 | Outcome 4: Trails and Open Space Completed Projects FY01-FY13

Map No.	Project	Partnering Agency	Watershed	Clean, Safe Creeks Grant Funding	Total Project Funding	FY Completed	Trails Proposed (Miles)	Trails Completed (Miles)	Open Space Access (Acres)	Trail Surface: Paved or Unpaved
	TYPE: Clean, Safe Creeks Trail Grant Agreements									
⑲	**Berryessa Creek Trail**, Reach 3 (Complete from Abel Street to Town Center-Hillview)	Milpitas	Coyote	$90,000	$1,005,000	04-05	1.5	1.5		Paved
⑳	**Selma Olinder/Coyote Creek Trail** (Coyote Creek at East Williams Street)	San José	Coyote	$250,000	$2,870,665	05-06	0.5	0.5	13	Paved
㉑	**Dobern Bridge/Lower Silver Creek Trail** (Dobern Ave to Bambi Lane)	San José	Coyote	$250,000	$657,096	05-06	0.25	0.25		Paved
㉒	**Coyote Lake** — Harvey Bear Ranch County Park Phase 1 Trails Master Plan Implementation (approx. E San Martin Ave to Roop Road)	County	Coyote	$200,000	$620,000	05-06	16	16		Unpaved
㉓	**Coyote Creek Trail**, Reach 1 Staging Area (Complete from Dixon Landing Road to Ranch Drive)	Milpitas	Coyote	$89,400	$1,120,800	05-06	1.75	1.75		Paved
㉔	**Calabazas Creek Trail** (Mission College to Old Mtn View Road)	Sunnyvale	West Valley	$200,000	$950,670	06-07	1.5	1.5		Paved
㉕	**Morgan Hill Wildlife Trail** (Edmundson Ave to Edes Court)	Morgan Hill	Uvas Llagas	$100,000	$289,448	06-07	0.2	0.2		Paved
㉖	**Coyote Creek Trail**, Reach 1 Staging Area (additional mileage added to Dixon to Ranch alignment)	Milpitas	Coyote	$0	$0	07-08	0.45	0.45		Paved
㉗	**Enhancement of the South Page Ponds** Groundwater Recharge Facility (Hacienda at Winchester)	Campbell	Guadalupe	$300,000	$556,837	07-08	0.32	0.32		Paved
㉘	**Coyote Creek Trail County Park** — Hellyer Gap Trail Improvement Project (Highway 101 at Hellyer Avenue, near Coyote Creek)	County	Coyote	$245,000	$495,000	07-08	0.5	0.5		Unpaved
㉙	**Stevens Creek Trail** — Habitat Protection and Historic Preservation of De Anza Knoll (in Rancho San Antonio County Park near Christo Rey Dr)	County	Lower Pen	$35,400	$262,959	07-08	2	2	130	Paved
㉚	**Stevens Creek Trail** — Reach 4, Segment 2 North (Yuba Dr to El Camino Real)	Mountain View	Lower Pen	$264,000	$5,533,382	07-08	0.5	0.5		Paved
㉛	**San Tomas Aquino Creek Trail**, Reach 1 & 2 (237 to Agnew) (Agnew to Scott)	Santa Clara	West Valley	$162,500	$4,229,090	08-09	2.6	2.6		Paved
㊱	**San Tomas Aquino Creek Trail**, Reach 3-5 (Scott to Bollinger)	Santa Clara	West Valley	$120,000	$7,320,000	09-10	6.89	6.89		Paved
㊲	**Stevens Creek Corridor Trail** — Phase 1 (Stevens Creek Blvd to McClellan Road)	Cupertino	Lower Pen	$300,000	$1,200,000	09-10	0.75	0.75		Unpaved
㊳	**Lions Creek Trail**	Gilroy	Uvas/Llagas	$249,550	$1,668,170	11-12	0.61	0.61		Paved
㊴	**Stevens Creek Trail**	Mountain View	Lower Pen	$145,000	$4,068,000	11-12	0.5	0.5		Paved
㊵	**Permanente Creek Trail**	Mountain View	Lower Pen	$125,000	$8,713,174	11-12	0.5	0.5		Paved
㊶	**Completion of the Bay Trail**	Environmental Volunteers, Inc.	Lower Pen	$58,681	$58,681	11-12	0.1	0.1		Unpaved

Table 4.1.4 | Outcome 4: Trails and Open Space Completed Projects FY01-FY13

Map No.	Project	Partnering Agency	Watershed	Clean, Safe Creeks Grant Funding	Total Project Funding	FY Completed	Trails Proposed (Miles)	Trails Completed (Miles)	Open Space Access (Acres)	Trail Surface: Paved or Unpaved
	TYPE: Clean, Safe Creeks Trail Grant Agreements									
(42)	**Madrone Channel Trail**	Morgan Hill	Uvas-Llagas	$100,725	$204,000	12-13	3	3		Unpaved
(43)	**Three Creek Trail, Trestle and Interim Improvements**	San José	Guadalupe	$450,000	$854,478	12-13	0.92	0.9		Unpaved
(44)	**Alviso Adobe Renovation**	Milpitas	Coyote	$70,000	$2,176,775	12-13	0.25	0.25		Unpaved
			SUBTOTAL	**$3,704,531**	**$44,854,225**		**41.59**	**41.57**	**143**	
	GRAND TOTAL (FY2001 - 2013)						**70.91**	**70.89**	**143**	

Map 4.1.1 | Trails and Open Space Completed Projects FY01 - FY13



Appendix

- Summary of Key Performance Indicators for the 15-year Program as presented to the voters in 2000 A2
- Financial Summaries A4
- Chart of Program Total Expected Revenue by Outcome A6
- Capital Projects and Support Costs A6
- Capital Projects — Program Allocation and Project Cost A8
- Glossary A9
- Report Contact List A12

Summary of Key Performance Indicators (15-year Program)

General Outcomes and Activities	Key Performance Indicators
1. Homes, schools, businesses and transportation networks are protected from flooding.	
1.1 Provide flood damage reduction by increasing the stream's ability to convey the 100-year flow.	
Permanente Creek *(SF Bay to El Camino Real)*	Flood damage reduction for 1,664 parcels that include: 1,378 homes, 160 businesses and 4 schools/institutions.
San Francisquito Creek *(SF Bay to Searsville Dam)*	Planning study and design of an engineering plan to provide flood damage reduction for 3,000 parcels.
Sunnyvale West Channel *(Guadalupe Slough to Hwy 101)*	Flood damage reduction for 11 parcels by increasing the creek's ability to convey the 100-year storm flow.
Calabazas Creek *(Miller Avenue to Wardell Rd)*	Flood damage reduction for 2,483 parcels that include: 2,270 homes, 90 businesses, and 7 schools/institutions.
Sunnyvale East Channel *(Guadalupe Slough to I-280)*	Flood damage reduction for 1,618 parcels that include: 1,450 homes, 95 businesses, and 4 schools/institutions.
Upper Guadalupe River *(I-280 to Blossom Hill Rd.)*	Using only **local funding**, a reduced project would extend from Hwy 280 to Curtner Avenue. Frequency of flooding would be reduced, however parcels in the flood plain would still be subjected to flooding from upstream sources. **Local and federal funding** for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions.
Berryessa Creek *(Lower Penitencia Creek to Old Piedmont Rd.)*	Using only **local funds**, a reduced project would extend from the confluence with Lower Penitencia upstream to Montague Expressway, modifying 3 miles of channel and protecting approximately 100 parcels. **Local and federal funding** for flood damage reduction for 1,814 parcels including 1,420 homes, 170 businesses, and 5 schools/institutions.
Coyote Creek *(Montague Expway to 280)*	Planning study, design, and partial construction (to the extent allowed by available funding) of an engineering plan to provide flood damage reduction.
Upper Llagas Creek *(Buena Vista Ave. to Wright Ave. and W. Little Llagas)*	**Local funding** only would include 3.25 miles of channel construction, including a 1-mile diversion. This would provide protection from a 10-year flood event for some agricultural land, leaving areas of Morgan Hill exposed to flooding. **Local and federal funding** for flood damage reduction combined would include: 1,397 parcels comprised of 820 homes, 200 businesses, 190 agricultural parcels, and 6 schools/institutions.
1.2 Sediment removal to preserve flood protection capacity of creeks.	Remove approximately 120,000 cubic yards of sediment from unimproved creeks.
1.3 Maintenance of newly improved creeks	Preserve flood protection capacity for 46 miles of newly improved creeks maintained (vegetation control and sediment removal).

Summary of Key Performance Indicators (15-year Program)

General Outcomes and Activities	Key Performance Indicators
2. There is clean, safe water in our creeks and bays.	
2.1 Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds.	Reduce urban runoff pollutants in South County cities.
2.2 Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds.	Provide hazardous material response for Uvas/Llagas Watersheds. Respond to incidents within 2 hours of initial report. (Equivalent of approximately 180 incident responses).
2.3 Impaired water bodies improvement	Reduce or prevent additional impairment of water.
2.4 Neighborhood creeks frequently inspected and cleaned of litter and graffiti.	60 creek cleanup events. Response time to remove litter and graffiti of less than 5 working days. Additional safety fence around creeks is installed or repaired as needed.
2.5 Partnership with the county on general surface water quality protection program/outreach.	Assist County or other cities in reduction of pollutants in surface water.
3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board.	
3.1 Vegetation management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks.	Creeks that are clear of plant growth that can impede water flow and reduce the flood protection capacity. Vegetation at mitigation sites properly monitored and managed to assure healthy habitat. (Equivalent of 22,000 acres removed and maintained).
3.2 Community partnership to identify and implement restoration of fisheries, riparian habitat or wetlands.	Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. (Equivalent of 100 acres of tidal or riparian habitat created or restored).
4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate.	
4.1 Provide additional trails and open space along creeks and in watersheds.	Community partnership to identify and provide public access to 70 miles of open space or trails along creeks.

Annual Financial Summary—Fiscal Year 2012-2013 ($ Thousands)

Revenue	Budget	Actual	% Received
Special Tax	$35,862	$36,093	101%
Interest[6]	961	936	97%
Other[1]	13,759	5,663	41%
TOTAL	**$50,582**	**$42,692**	**84%**

Expenditures	Estimated Annual Allocation (Inflated)	Actual			% of Allocation Spent or Reserved
		Spent[2]	Allocated to Reserves[3]	Spent + Reserved	
Outcome 1					
Activity 1.1 Capital Projects (Local/State portion only)	25,302	16,833	8,469	25,302	100%
Permanente Creek	2,875	2,639	236	2,875	100%
San Francisquito Creek	789	1,964	—	1,964	249%
Sunnyvale West Channel	519	—	519	519	100%
Calabazas Creek	3,673	196	3,476	3,673	100%
Sunnyvale East Channel	2,747	1,776	971	2,747	100%
Upper Guadalupe River	7,347	2,769	4,577	7,347	100%
Berryessa Creek	2,068	1,733	335	2,068	100%
Coyote Creek	2,873	412	2,461	2,873	100%
Upper Llagas Creek	2,413	5,344	—	5,344	222%
Subtotal	**25,302**	**16,833**	**8,469**	**25,302**	**100%**
Activity 1.1 Program Management and Support[4]	1,257	951	307	1,257	100%
Activity 1.2 Sediment Removal[7]	415	371	44	415	100%
Activity 1.3 Maintenance of newly improved creeks	526	—	526	526	100%
Subtotal	**27,501**	**18,155**	**9,346**	**27,501**	**100%**
Outcome 2					
Activity 2.1 District Urban Runoff Pollution Prevention[7]	55	83	(28)	55	150%
Activity 2.2 Hazardous Materials Management and Incident Response[7]	42	30	12	42	100%
Activity 2.3 Impaired Water Bodies Improvement[7]	1,467	1,998	(531)	1,467	136%
Activity 2.4 Good Neighbor Maintenance[7]	1,384	887	497	1,384	100%
Activity 2.5 Pollution Prevention Partnerships with County[7]	540	535	5	540	100%
Subtotal	**3,488**	**3,533**	**(45)**	**3,488**	**101%**
Outcome 3					
Activity 3.1 Vegetation Management[7]	1,758	2,408	(650)	1,758	137%
Activity 3.2 Environmental Restoration	2,893	733	2,160	2,893	100%
Subtotal	**4,651**	**3,141**	**1,510**	**4,651**	**100%**
Outcome 4					
Activity 4.1 Open Space and Trails	1,273	203	1,071	1,273	100%
Subtotal of all Outcome Expenditures/Appropriations	**36,914**	**25,032**	**11,882**	**36,914**	**100%**
Program Management and Support[4]	350	346	4	350	100%
Unallocated Resources[5]	13,317	—	5,427	5,427	41%
TOTAL	**$50,582**	**$25,378**	**$17,314**	**$42,692**	**84%**

---

[1] Actual includes reimbursement from DWR for Upper Guadalupe and from City of Morgan Hill for Upper Llagas $4.6m and $0.8m respectively

[2] Spent includes actual expenditures only; encumbrances are included with Reserves

[3] Negative amounts in the Allocated to Reserves column represent withdrawals or decreases to reserves for that particular activity

[4] Program Management and Support: portion under Outcome 1 is directly attributable to capital project support while remaining supports operations and program-wide costs

[5] Unallocated Resources is the amount of additional revenues received each year over the Estimated Annual Allocation (adjusted for inflation); this amount is available in reserves to allocate toward future operating maintenance activities and/or capital projects

[6] Actual Interest excludes year-end fair market value adjustments that are required by GASB for financial statement reporting purposes only

[7] Reserves for these activities decreased by $805,774, which includes an increase of $155,197 in encumbrance and a net reduction of $650,577 in reserves for Other Program Operating Activities

Cumulative Financial Summary—FY 2001/02 - 2012/13 ($ Thousands)

Revenue	Budget	Actual	% Received
Special Tax	$360,547	$364,206	101%
Interest[8]	19,032	23,194	122%
Other[1]	26,549	23,427	88%
TOTAL	**$406,129**	**$410,827**	**101%**

Expenditures	Estimated Annual Allocation (Inflated)	Actual			% of Allocation Spent or Reserved
		Spent[2]	Allocated to Reserves[3]	Spent + Reserved	
Outcome 1					
Activity 1.1 Capital Projects (Local/State portion only)[10]	259,416	143,644	115,772	259,416	100%
Permanente Creek	29,473	7,448	22,025		100%
San Francisquito Creek	8,088	3,119	4,969		100%
Sunnyvale West Channel	5,322	—	5,322		100%
Calabazas Creek	37,653	10,651	27,001		100%
Sunnyvale East Channel	28,161	9,735	18,426		100%
Upper Guadalupe River	84,824	73,106	11,718		100%
Berryessa Creek	21,206	7,782	13,424		100%
Coyote Creek	29,454	10,065	19,389		100%
Upper Llagas Creek	24,735	21,738	2,997		100%
Subtotal	**268,916**	**143,644**	**125,272**		**100%**
Activity 1.1 Program Management and Support[4]	12,847	13,520	(673)	12,847	105%
Activity 1.2 Sediment Removal[9]	4,977	4,581	397	4,977	100%
Activity 1.3 Maintenance of newly improved creeks	5,393	-	5,393	5,393	100%
Subtotal	**292,134**	**161,745**	**130,389**	**292,134**	**100%**
Outcome 2					
Activity 2.1 District Urban Runoff Pollution Prevention[9]	568	551	17	568	100%
Activity 2.2 Hazardous Materials Management and Incident Response[9]	426	392	34	426	100%
Activity 2.3 Impaired Water Bodies Improvement[9]	15,044	12,679	2,364	15,044	100%
Activity 2.4 Good Neighbor Maintenance[9]	14,705	12,016	2,689	14,705	100%
Activity 2.5 Pollution Prevention Partnerships with County[9]	5,535	4,451	1,084	5,535	100%
Subtotal	**36,277**	**30,089**	**6,188**	**36,277**	**100%**
Outcome 3					
Activity 3.1 Vegetation Management[9]	19,556	23,341	(3,785)	19,556	119%
Activity 3.2 Environmental Restoration[6]	29,661	10,313	19,349	29,661	100%
Subtotal	**49,217**	**33,654**	**15,564**	**49,217**	**100%**
Outcome 4					
Activity 4.1 Open Space and Trails[7]	13,057	4,044	9,013	13,057	100%
Subtotal of all Outcome Expenditures/Appropriations	**390,685**	**229,531**	**161,154**	**390,685**	**100%**
Program Management and Support[4]	3,655	2,583	1,072	3,655	100%
Unallocated Resources[5]	11,789	—	16,487	16,487	140%
TOTAL	**$406,129**	**$232,114**	**$178,713**	**$410,827**	**101%**

[1] Actual includes $21.7 million reimbursement from the State/Local Government; majority of the amount is for Upper Guadalupe and Upper Llagas projects. $1.7 million reimbursement for Mercury cleanup effort

[2] Spent includes actual expenditures only; encumbrances are included with Reserves

[3] Negative numbers in the Allocated to Reserves column represent withdrawals or decreases to reserves for that particular activity

[4] Program Management and Support: portion under Outcome 1 is directly attributable to capital project support while remaining supports operations and program-wide costs.

[5] Unallocated Resources is the cumulative amount of additional revenues received each year over the Estimated Annual Allocation; this amount is available in reserves to allocate toward future operating maintenance activities and/or capital projects

[6] Reserves for Environmental Restoration include $1,402,971 for encumbrance obligations; the balance is available for future grants

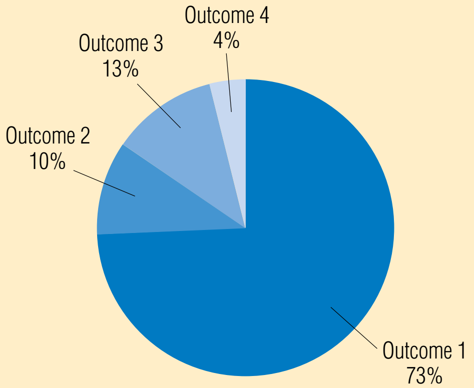
[7] Reserves for Open Space and Trails include $1,411,520 for encumbrance obligations; the balance is available for future grants

[8] Actual excludes year-end fair market value adjustments that are required by GASB for financial statement reporting purposes only

[9] Reserves for these activities include $2,171,799 for Other Program Operating Activities and $628,112 for encumbrance obligations, for a total of $2,799,911

[10] The Accumulated allocation for Upper Guadalupe projects includes $9.5 million loan in FY11 from unallocated reserves. It may be reduced upon the receipts of federal funding

Clean, Safe Creeks and Natural Flood Protection Program Total Expected Revenue by Program Outcome

Category	Expected Revenue	15-Year Program Graph
Outcome 1 – Natural Flood Protection	$337,456,000	
Outcome 2 – Clean, Safe Water	$ 46,869,000	
Outcome 3 – Healthy Ecosystems	$ 62,492,000	
Outcome 4 – Trails, Parks, and Open Space	$ 17,111,000	
15-year Program Total	**$463,928,000**	

Note: The capital projects under Natural Flood Protection include only District costs, and exclude participation from other agencies.

Capital Project and Support Costs

Outcome 1 includes capital project and support costs for implementation of the nine capital improvement projects identified in the Clean, Safe Creeks and Natural Flood Protection Program (Program) measure. The initial fifteen-year estimate of the projected funding available from the special parcel tax for these capital improvements was $325 million for direct project costs. An additional $13.5 million has been spent to date for capital support.

Capital **project** costs include planning, design, land acquisition, and construction costs that are directly attributable to the capital improvements.

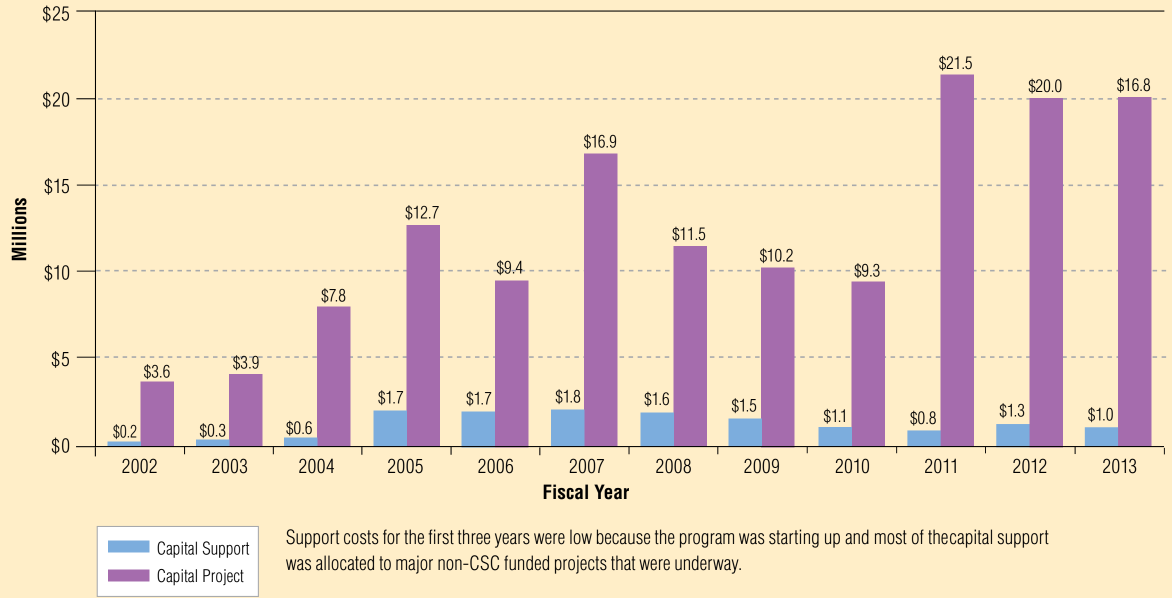
Capital **support** costs include activities that are necessary to implement the District's Capital Improvement Program (CIP). These activities are critical support to successful implementation of the CIP and include the following:

1. Ongoing CIP planning and analysis for prioritization, scheduling, and funding changes
2. Maintaining a quality management system to ensure CIP policies and procedures are followed and process improvement opportunities are identified and implemented
3. Developing and maintaining tools and curriculums (such as Geomorphic Fieldwork Guide, Bank Protection/ Erosion Repair Design Guide, and Cost Estimation Guide) to ensure that the District's capital projects delivery are current within engineering and technical advances, and changing laws, rules and regulations
4. Day to day administrative and management functions
5. Training and development of staff

Capital support costs are allocated each year to the various District funds including the Program fund based on the estimated staff hours directly charged to capital projects.

Chart 1 illustrates the capital project and support costs expended during the first twelve years of the Program from FY02 through FY13. The support costs during the first three years were low as the program was starting up. Planning, design and construction spending has been trending upward with the majority of spending planned to occur toward the end of the program.

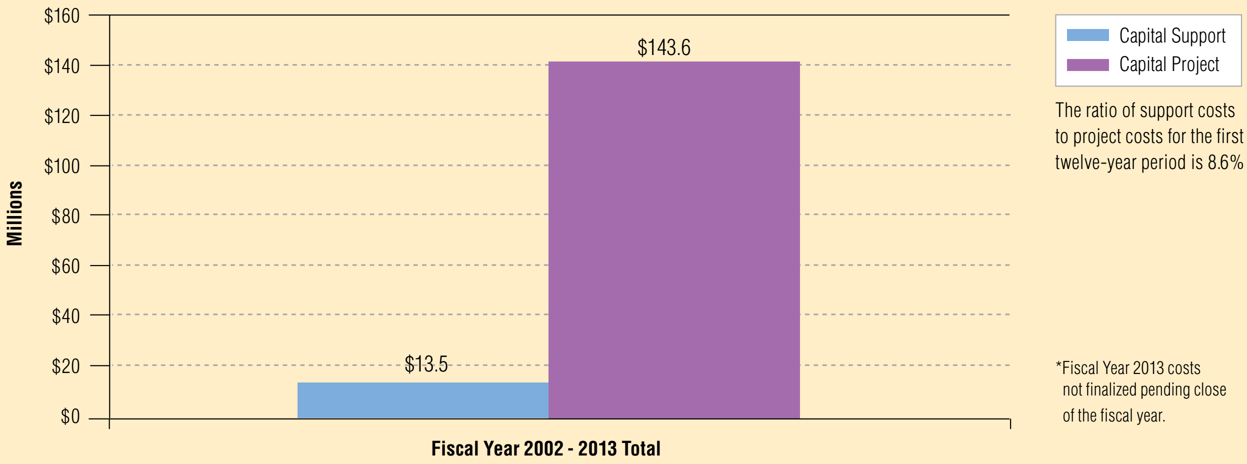
Chart 1 CSC Capital Support vs Project Costs — Fiscal Year 2002 - Fiscal Year 2013 Actuals*



Support costs for the first three years were low because the program was starting up and most of thecapital support was allocated to major non-CSC funded projects that were underway.

*Fiscal Year 2013 costs not finalized pending close of the fiscal year.

Chart 2 CSC Capital Support vs Project Costs — First Twelve Years' Actuals*



The ratio of support costs to project costs for the first twelve-year period is 8.6%

*Fiscal Year 2013 costs not finalized pending close of the fiscal year.

Chart 2 shows the cumulative total for the actual capital project and support costs expended during the first twelve year period. The ratio of capital support to capital project costs for the initial twelve year period is 8.6%. Projected capital project and support costs are not shown because the Clean Safe Creeks program transitioned to the new Safe Clean Water program as of July 1, 2013. However, under the old Clean Safe Creeks program, the majority of capital project spending would have occurred at the end of the program as the projects were constructed. This fact would significantly drive down the ratio of capital support to capital project costs over the life of the program to well within the benchmark estimate of 7.4% provided in December 2005.

It should be noted that these charts only reflect the Program funding for Outcome 1 capital improvements and do not include other construction funding (i.e. Army Corps of Engineers) that are dependent on federal appropriations.

Capital Projects — Program Allocation and Project Cost

Permanente

Total anticipated allocation: $40.6 million ($27.4 million in 1999 dollars escalated at 3% per year)

The actual cost to date for this project is $7.5 million. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in Safe, Clean Water annual reports beginning in the FY14 annual report.

San Francisquito

Total anticipated allocation: $11.7 million ($8 million in 1999 dollars escalated at 3% per year)

The actual cost to date for this project is $3.2 million. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in Safe, Clean Water annual reports beginning in the FY14 annual report.

Sunnyvale East

Total anticipated allocation: $35.4 million ($24.1 million in 1999 dollars escalated at 3% per year)

The actual cost to date is $9.7 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Sunnyvale West

Total anticipated allocation: $7.5 million ($5.1 million in 1999 dollars escalated at 3% per year)

The actual cost to date — see Sunnyvale East. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Calabazas

Total anticipated allocation: $51.5 million ($35.1 million in 1999 dollars escalated at 3% per year)

This Project has been completed and closed. The actual cost of this project is $10.7 million.

Upper Guadalupe

Total anticipated allocation: $136.1 million

Actual cost to date is $74.0 million. (In FY04-FY11 approximately $600,000 of expenditures associated with rental property maintenance were charged to this project. This amount has been deducted from the total expenditure to date reported in FY12 for this project.) The project's benefit-to-cost ratio (BCR) is 1.36. This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Berryessa

Total anticipated allocation: $27.9 million ($19.0 million in 1999 dollars escalated at 3% per year)

The actual cost to date is $7.8 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Coyote

Total anticipated allocation: $47.0 million ($32 million in 1999 dollars escalated at 3% per year)

The actual cost to date is $10.1 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Upper Llagas

Total anticipated allocation: $29.2 million ($12.7M from Clean Safe Creeks in 1999 dollars escalated at 3% per year + $10.5M from State Subventions). The project's benefit to cost ratio (BCR) is 0.23.

The actual cost to date is $21.2 million (ref. Appendix A5). This project has been transitioned to Safe, Clean Water; therefore, future projections will be reflected in the Safe, Clean Water annual reports beginning with the FY14 annual report.

Glossary

Average Annual Expenditure

The estimated amount of annual, fiscal year funding available to be allocated to each outcome activity based on the original Clean, Safe Creeks and Natural Flood Protection Program's target, inflated by 3% per year.

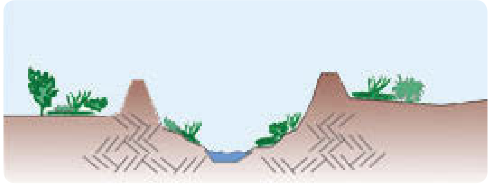
BCR:

Benefit to cost ratio. Ratio is used by the U.S. Army Corps of Engineers to determine level of federal participation in a Project.

CEQA

California Environmental Quality Act.

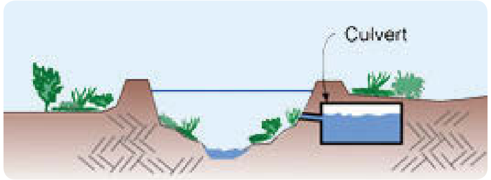
Channel



Co-permittee

The thirteen cities within Santa Clara County, except for Morgan Hill and Gilroy, the County of Santa Clara, and the Santa Clara Valley Water District, totaling 15 agencies included in the National Pollutant Discharge Elimination System (NPDES) Phase I permit. All of these agencies are part of this permit. Morgan Hill and Gilroy are in Phase II.

Culvert



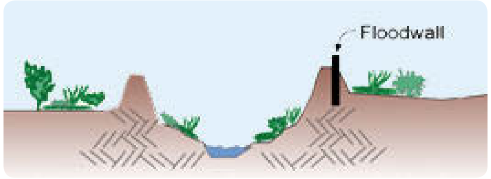
Encumbrance

Commitment for future expenditure of funds based on unfilled purchase orders, unperformed contracts, etc. Funds are reserved or set aside at year end in the Reserve for Encumbrances to ensure payment of the District's liabilities.

Environmental Enhancement:

Action taken by the District that benefits the environment, is NOT mitigation, and is undertaken voluntarily. Enhancement actions may include environmental restoration, rehabilitation, preservation or creation. In instances where enhancements are located in the same vicinity as a mitigation project, actions must exceed required compliance to compensate for environmental impacts to be considered environmental enhancements.

Floodwall



Glossary

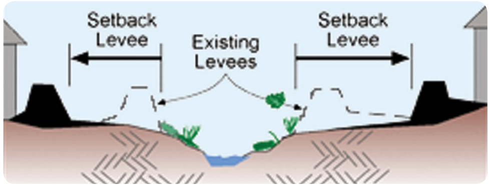
Historical Ecology Study

Examination of maps, aerial photographs, and other historical documents to determine the historical location and condition of creeks and rivers and their ecology.

ISO (International Organization for Standardization)

The world's largest developer of standards. Although ISO's principal activity is the development of technical standards, ISO standards also have important economic and social repercussions. ISO standards make a positive difference, not just to engineers and manufacturers for whom they solve basic problems in production and distribution, but to society as a whole.

Levee/Setback Levee



National Economic Development Plan

Federal policy requires the U.S. Army Corps of Engineers (Corps) evaluate a range of alternatives to determine which alternative maximizes the economic benefits of public investment in a project. The cost effectiveness of public investment is measured by comparing average annual economic benefits and costs. The alternative with the greatest net benefits is defined as the plan which maximizes National Economic Development (NED). The NED plan is usually recommended by the Corps for construction.

Problem Definition Report

A report that describes findings and problems identified after initial investigations and evaluation of existing conditions in the project area. The findings are used to refine the project objectives.

SCVURPPP (Santa Clara Valley Urban Runoff Pollution Prevention Program)

A program formed by the 15 Co-permittees to comply with the NPDES regulations.

Santa Clara County Green Business Program

This program is a partnership between government, business, and the public in support of continuous environmental improvement. This voluntary program encourages business to take proactive actions that are good for both their bottom-line and the environment.

State Water Resources Control Board

The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The mission of the State Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses.

Subvention

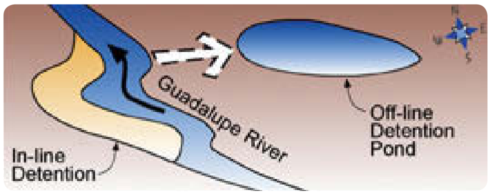
Subventions are reimbursements for rights of way and relocation costs of channel improvements and levee projects provided to flood control agencies by the Department of Water Resources Flood Subventions Program. See additional information at ***www.fcpsubventions.water.ca.gov/overview/overview_index.cfm***.

Glossary

Total Maximum Daily Load (TMDL)

A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. Under section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters.

Upstream and Offstream Storage



Report Contact List

Outcome 1— Homes, schools, businesses and transportation networks are protected from flooding		
Activity 1.1	Melanie Richardson	(mrichardson@valleywater.org)
Activity 1.2	Carol Fredrickson	(cfredrickson@valleywater.org)
Activity 1.3	Liang Lee	(llee@valleywater.org)
Outcome 2 — There is clean, safe water in our creeks and bays		
Activity 2.1	Shree Dharasker	(sdharasker@valleywater.org)
Activity 2.2	Larry Lopez	(llopez@valleywater.org)
Activity 2.3	Shree Dharasker	(sdharasker@valleywater.org)
Activity 2.4	Carol Fredrickson	(cfredrickson@valleywater.org)
Activity 2.5	Shree Dharasker	(sdharasker@valleywater.org)
Outcome 3 — Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board		
Activity 3.1	Mark Wander	(mwander@valleywater.org)
Activity 3.2	Shree Dharasker	(sdharasker@valleywater.org)
Outcome 4 — There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate		
Activity 4.1	Shree Dharasker	(sdharasker@valleywater.org)
Financial Information	Najon Chu	(nchu@valleywater.org)

All Santa Clara Valley Water District report contacts can be reached at: **(408) 265-2600.**

Clean, Safe Creeks and Natural Flood Protection Program Independent Oversight Committee

---

5750 ALMADEN EXPWY
SAN JOSE, CA 95118
(408) 265-2600
www.valleywater.org

Printed on recycled paper using soy-based inks. 300 03/14, YD